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DETROIT MEDICAL JOURNAL

VOL. IV. OCTOBER, 1904. NO. 7

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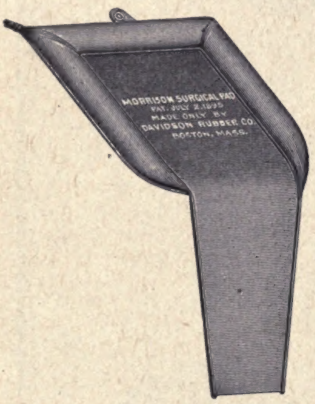

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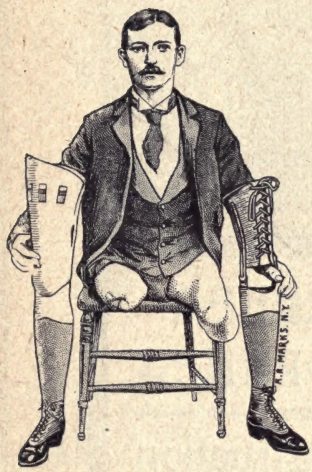

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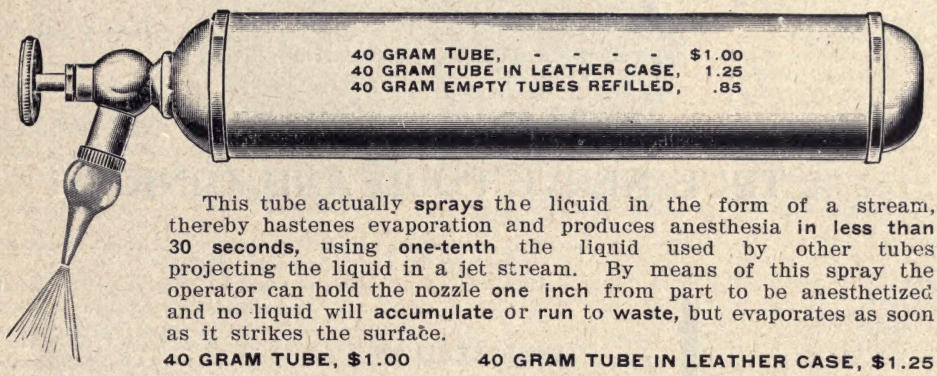

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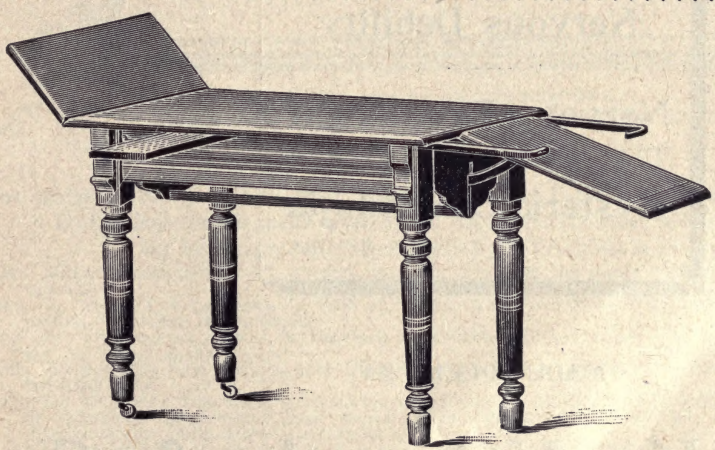

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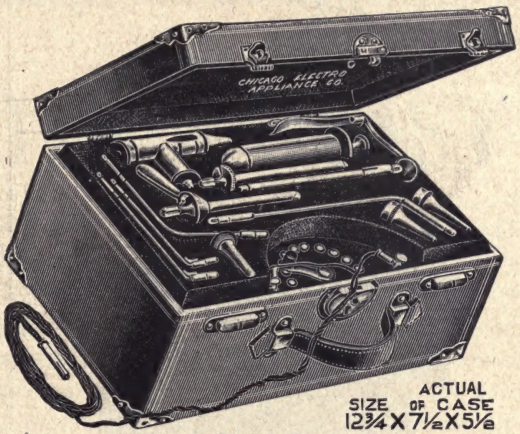

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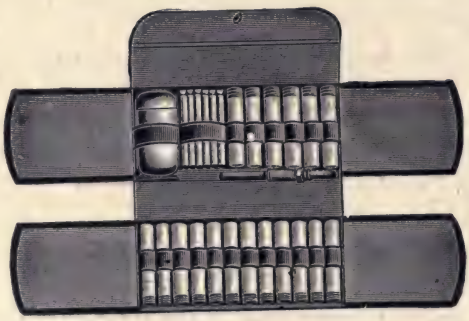

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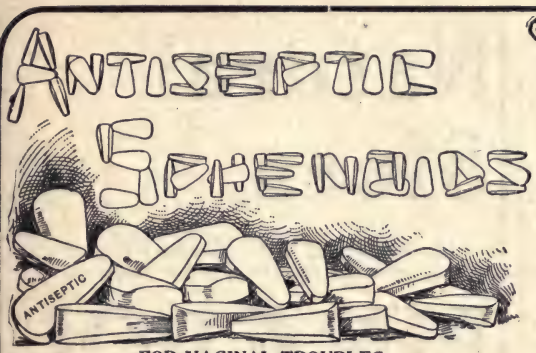

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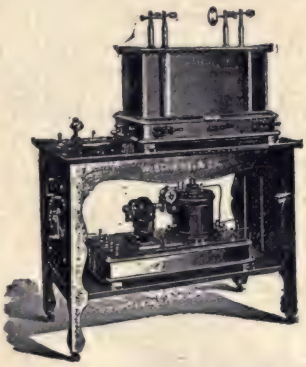

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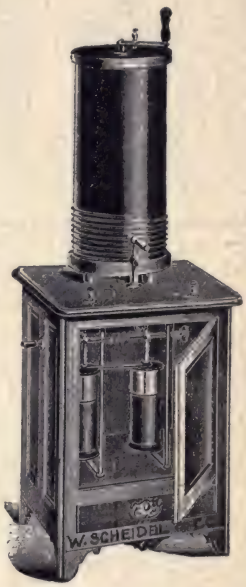

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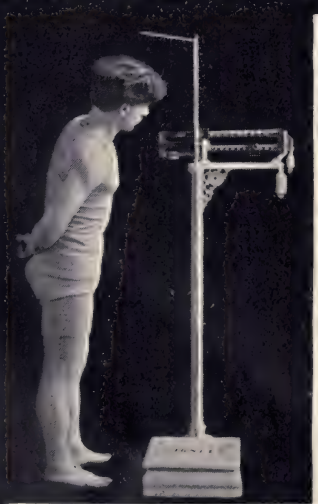

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THE DETROIT MEDICAL JOURNAL.

VOL. IV. OCTOBER, 1904. NO. 7.

THE NECESSITY FOR A PERIODICAL EXAMINATION OF THE APPARENTLY HEALTHY.*

ALEXANDER MacKENZIE CAMPBELL, M. D.,
Grand Rapids, Michigan.

Prevention of disease is the transcendent idea in the mind of the profession at this time. The day is past when the physician or surgeon considers his whole duty done when the successfully conducts a medical case to recovery, or restores a patient to health through a surgical procedure. It is his duty, and greatly to his advantage, to know as early as is possible the cause and nature of disease processes, the result of which he is so frequently and too late called to repair. The doctor bears a tremendous responsibility in advising people how to keep well, in addition to caring for them when they become ill. He must stand as the guardian of public health. He must be the first to sound the warning note of alarm when the public or the individual is in danger; and he must be the first to advise his patients, even if unsolicitedly when it comes to his knowledge, that they are predisposing themselves to physical or mental disaster.

To illustrate the subject under consideration, one might divide society into three classes. 1st, the perfectly healthy; 2nd, the apparently healthy; and 3rd, the unhealthy. The necessity for a periodical examination of the apparently healthy is illustrated almost every day in the experience of the active practitioner. There is after all only a small percentage of our population who belong to the first class, that is, the perfectly healthy. While the name of those who belong to the second is legion, that is, the apparently healthy, who bear the same pathological condition, which if observed in its incipiency might be entirely overcome, while if neglected might assume colossal or even fatal proportions. It would be an interesting experiment to select a given number of men from the various vocations of life, with a view of ascertaining what percentage belongs to each of these three classes. Take the laborer from the field, th workman from the bench, the artist from the studio, the scientist from the laboratory, or even the doctor from the office, and subject a given number of them to a careful physical examination, and the percentage of the perfectly healthy as compared with the apparently healthy would be a revelation.

An attempt to do more than generalize upon this subject would neither be possible or practicable at this time. The writer simply wishes to urge upon the profession the necessity of its advising the apparently healthy to subject themselves to a physical examination at stated intervals, and thus to make it possible to have pathological conditions recognized and remedied at the earliest possible date. It is a common practice for people to pay a visit of inspection to the dentist every few months, to have minute cavities in

*Read before the Michigan State Medical Society, Grand Rapids, May 27, 1904.
Detroit, Mich., October 15, 1904.

teeth subjected to proper treatment. They do not consult the dentist because their teeth ache or because they themselves observe the evidences of disase; but they consult him to prevent suffering and disease, and because they know the inevitable tendency to dental decay. These very people may suffer from a severe cough for weeks and months, while a serious cavity may form in the lung before they consult a physician. It is the duty of our profession to educate people to undergo a periodical examination, even when in a state of apparent health. If this were done, human suffering would be greatly minimized, and human life would be immeasurably lengthened.

The statistics from large life insurance companies show that a high percentage of applicants for insurance are rejected. Many of these are rejected because of disease of which they have been entirely ignorant. And many are accepted, who through deceit and intrigue deceive the examining physician, and consequently pass as perfectly healthy men. An almost greater army of applicants for enlistment in the United States Army and Navy are rejected than are accepted.

While preparing this paper an intelligent business man of large affairs and responsibility, consulted the writer, not because, as he stated himself he was ill, but he wanted to know that the machine (referring to his body) was in perfect condition. He stated that the maintenance of perfect health was his greatest capital, and that it was worth many times the trouble and expense a careful examination entailed, to know to which of the three classes he belonged. Unfortunately this man, while in apparent good health, was far from well. His heart was hypertrophied, his arteries were artheromatous, and a microscopical examination of the urinary sediment revealed a number of granular casts. He sought counsel earlier than many people do, and yet his condition has doubtless existed for some time.

A short time ago a lady in middle life consulted the writer, stating that she was in perfect health with the exception of some slight rheumatic trouble in her left leg. She stated that the leg would swell and become very painful, and that she simply wanted some relief from pain. Careful questioning excluded the possibility of rheumatism, and vaginal and abdominal examination revealed a large ovarian cyst, which accounted for the pain and swelling in her limb. A young high school boy consulted the writer for a slight headache, which seemed to be a sequella of la grippe. A chemical examination of the urine showed a high percentage of albumen and a centrifugal sediment, when placed under the microscope, demonstrated an innumerable number of blood corpuscles and many granular casts. This boy was apparently well, with the exception of a slight headache, and yet he was suffering from a serious kidney lesion that may always require close observation.

The case-books of the general practitioner and specialist alike contain the histories of thousands of patients who go on for years, in a state of apparent health, and never consult a physician until pathological conditions have become so deep-seated as to be beyond a cure. The sudden collapse of men in the highest places in the business and professional world is a sad and frequent commentary on the necessity of keeping the organism under close observation.

If a man in apparent health shows a proclivity to weakness in one or more parts of the body, that tendency should be overcome by careful observation and necessary treatment. Tuberculosis is considered by high authorities to be exceedingly amenable to treatment if recognized in its very incipiency; and yet we all know what a fatal disease it

is as yet, because its victims go on for months in a state of apparent health, and because many physicians themselves do not diagnose the disease until it becomes well advanced. Diseases of the circulatory system, diseases of the blood and ductless glands, diseases of the nervous system and of the digestive system, may be recognized before they have any apparent effect upon the health. For instance, a test breakfast will demonstrate the presence of malignant disease of the stomach, long before any tumor can be felt and early enough to make an operation of some benefit. The work on hematology during the last decade has made the early recognition of the disease of the blood and of some of the ductless glands a certainty.

The examination, as suggested, should be periodical, at least yearly, and should be careful and thorough in every detail. It should be done systematically, and conforming to the organ systems as suggested by some authorities, be performed as follows:

First—Examination of the respiratory apparatus.

Second—Examination of the circulatory apparatus.

Third—Examination of the digestive apparatus.

Fourth—Examination of the urinary apparatus.

Fifth—Examination of the nervous system.

Conforming to some such system as above, whenever there is the slightest indication a bacteriological and chemical diagnoses should be made.

To recapitulate:—1st. We owe a tremendous responsibility to keep people well.

2nd. Only a small percentage of people enjoy perfect health.

3rd. We must educate people in apparent health to the necessity of subjecting themselves to a periodical physical examination.

4th. This examination should be careful and systematic; and should embrace all the approved chemical and microscopic tests for the diagnosis of disease.

Widdicomb Building, Grand Rapids, Mich.
May, 1904.

INTRATRACHEAL INJECTIONS IN BRONCHIAL AND PULMONARY AFFECTIONS.
Second Paper.

WILLIS S. ANDERSON, M. D.,
Detroit, Mich.

Over three years ago the writer published a paper on the above subject, and reported the results of two years' experience with this method. Since then the systematic use in a number of cases has proven its value as a therapeutic measure.

The writer has made a large number of experiments upon dogs, to prove the absorbability of drugs through the bronchial mucous membrane, and to prove that a considerable quantity of a non-irritating liquid can be introduced into the bronchi without injury. Various liquids have been tried to test the relative irritability of the different vehicles, and olive oil has been found to be non-irritating, and in every way suitable as a vehicle for the medicaments. In the March number of the *Journal of the Michigan State Medical Society* I gave in detail the results of those experiments, which proved the ready absorbability of such drugs as iodin, atropin, digitalis and strychnin.

The normal trachea and bronchi are

shown by experiments to be sterile, or nearly so, but in a diseased condition numerous organisms are found. This is true even in acute bronchitis. In pulmonary tuberculosis secondary infection plays an important part. The toxic symptoms are proportionate to the secondary infection and the prognosis depends largely upon our ability to cope with this infection. Intratracheal injections offer a direct method of introducing medicaments, and allow germicidal drugs to come directly into contact with the affected part. They also act as a sedative. As they are directly absorbed into the circulation, they act systematically as well as locally without taxing the stomach.

The essential oils have been found useful. They are germicidal in their action, lessen the secretion and diminish the secondary infection. The ones which have been used are the oil of eucalyptus, thyme, cinnamon and wintergreen. They may be employed singly or in combination in from two to five per cent. solution in olive oil. It is well to commence with a three to five per cent. solution of oil of ecalyptus in olive oil. This is not irritating, even to sensitive mucous membranes. Menthol has a local sedative action and may be combined with camphor. Guaiacol has been used in many cases in a two per cent. solution. The formula which has been used mostly by the writer is camphor-menthol five per cent., oil of ecalyptus five per cent., guaiacol two per cent. in olive oil. If the solution is not perfectly free from foreign particles it must be filtered through cotton. It is then sterilized in a hot water bath. The solution and syringe should be warmed to body temperature before they are used. A syringe with a suitably curved canula is used. From one to two drams is the proper dose, which may be repeated in a few minutes. Daily treatments usually give the best results, but in less severe cases they may be given on alternate days. The injection is given with the aid of a laryngoscopic mirror, or direct. The tongue in each case is held out and the patient inhales as the injection is given.

The injections relieve cough, lessen the mucus secreted and render it more easily expelled, allay pain and irritation and diminish dyspnœa. As the local condition improves, the toxic symptoms, such as fever and night sweats, will be lessened in proportion as the secondary infection is overcome.

In the congestive stage of acute bronchitis, with fever, headache, muscular pains and general malaise, the injections should not be used to the exclusion of the usual treatment. They will, however, lessen an irritable cough, facilitate expectoration and relieve the sense of oppression frequently felt by these patients.

Recurring bronchial attacks are promptly relieved by the injections without recourse to drugs by the stomach. One to three treatments will often cut short an attack that otherwise would prove decidedly troublesome.

The so-called "Winter Coughs" which are distressing to the patient and so difficult to relieve by the usual medication are usually controlled easily by the injections. In handling these cases we must remember that personal hygiene is important. Men who are high livers, those who drink and smoke considerably and eat heartily, are more prone to these bronchial irritations than those of better habits. The regulation of the diet, the decrease or interdiction of alcoholics and tobacco make it easier to cure these bronchial affections. After the regulation of the diet and habits of our patient, the cough and bronchial irritation can be relieved best by intratracheal injections. The medicament acts directly upon the parts affected without taxing the stomach. They should be given daily at first,

and then every alternate day until the patient is cured. The lessened cough and irritation is usually noticed after the first treatment, and the sense of well being, referred to the chest, is so marked that the patients welcome the treatments. In chronic bronchitis the writer has never used any treatment that has given such uniformily good results as daily intratracheal injections. As the patient improves, every alternate day is sufficient. In bronchiectasis with a muco-purulent or purulent expectoration, the direct treatment of the parts affected has a decided advantage over the usual methods. The amount of expectoration is diminished and its character improved. The germicidal action of the injections proves especially valuable in this condition.

A patient with marked asthmatic symptoms, such as dyspnœa, sibilant, sonorous and loud whistling râles is often markedly relieved in from two to five minutes after an injection is given. Not only are the subjective symptoms relieved but the objective signs are also. Ascultation of the chest a few moments after the injection will show a marked lessening, or sometimes the entire disappearance of the râles. In their use for the quick relief of asthmatic symptoms care must be used not to inject too large a quantity. One dram well injected and all retained will often accomplish more than a two-dram dose. Should a dose too large, or drugs too irritating be used, little or no relief will be experienced. While the injections are valuable in asthma, dependence must not b placed upon them to the exclusion of all other methods of treatment. Several types of asthma are recognized clinically as spasmodic, cardiac and bronchial asthma. In every case the underlying cause ought to be ascertained. We shall not consider cardiac asthma, as its treatment is general, and not influenced by the injections unless there is an accompanying local disturbance. Oftentimes a careful search reveals an exciting cause. Nasal obstruction is the most frequent single cause, and if present ought to be corrected. In a similar manner the stomach, intestines, rectum and pelvic organs may be the seat of lesions, which may reflexly excite spasmodic asthma. After all discoverable lesions have been corrected there are still some patients who persist in their asthmatic attacks. These can be promptly and in some instances permantly relieved by intra-tracheal injections. In the bronchial type, where bronchitis is constantly present and the spasmodic symptoms appear at varying intervals, much can be done to effect relief. The bronchial element is rapidly and completely controlled by the injections.

Phthisis offers an especially good field for the injections. Of all the chronic diseases there is probably not one so susceptible of satisfactory treatment as pulmonary phthisis. In the early stages a large proportion ought to be cured by proper treatment. It is only when the disease is advanced that we can offer but little hope of improvement. It is imperative that we make an early diagnosis in the disease if we are to give our patients the best chance of recovery. It is important to recognize that all chronic diseases of the lungs are not tubercular, at least at their inception. Unless we recognize a non-tubercular and a tubercular form of phthisis, we do not appreciate the value of our therapeutic resources, and shall fail to do for some of our patients all that we otherwise could. Many cases start as a non-tubercular inflammation of the lungs and it is only later in the progress of the disease that the tubercular element becomes engrafted upon the lesion. It is in this early, or non-tubercular stage that so much can be done for our patients. Another error is often made in

waiting for the tubercle bacilli to be found in the sputum before a diagnosis is made. We know that the bacilli are not regularly found until there is some breaking down of the pulmonary tissue, which means that the disease is well advanced. The diagnosis ought to be made from the early physical signs without waiting for the organism to be found in the sputum. It is generally accepted that we have no specific for pulmonary tuberculosis. The best means of combating the disease are hygienic, dietetic and climatic treatment. Drugs are of value in proportion as they increase bodily resistance and relieve symptoms without interfering with the nutrition of the patient. Just the moment they interfere with the stomach, or with the processes of digestion they should be stopped. No patient with chronic pulmonary disease can hope to recover unless digestion and assimilation are sufficient to meet the needs of the body. Many patients are positively injured by excessive drugging, especially by such drugs as cod-liver oil, creosote, and others given by the stomach. Treatment may be considered under two heads: first, to use every means at our command to improve nutrition, and place the patient in the best hygienic surroundings; second, to relieve the symptoms which are injuring the patient, without sacrificing nutrition.

Under the first head we include feeding, climate, hygienic surroundings and exercise. These are of paramount importance, but do not come within the scope of this paper. Under the second head we include medicinal treatment. The symptoms which usually demand our attention are cough, dyspnœa, fever and sometimes pain. These symptoms can all be markedly improved by the injections without recourse to medication by the stomach. The secondary infection which plays so important a part in these cases can be lessened by the injections, and in proportion as the secondary infection is overcome we shall find the symptoms improved. The cough is relieved promptly in the majority of cases, and the pain, so often dependent upon the cough, is also relieved. The lessening of the dyspnœa is one of the gratifying results of the treatment. This can only be appreciated by those who have had experience with the method. The sense of well-being and relief of the dyspnœa occurs in a few moments after the injection, and is quickly noticed by the patients. They welcome the injections if for no other reason than the respiratory comfort which follows their use.

Occasionally the injections are difficult to give and coughing and irritation result, but a little care and patience will usually overcome the difficulties, and only in a very small per cent. of the cases will it be necessary to discontinue the injections on account of the irritation.

912 Chamber of Commerce.

THE USE OF RUBBER GLOVES AS A PROPHYLACTIC IN OBSTETRICS.*

F. J. W. MAGUIRE, B. S., M. D.,
Detroit, Mich.

In recommending rubber gloves as a prophylactic against infection in obstetrics, I do not wish to be considered as a faddist, but feel justified in making known over one hundred cases of instrumental delivery in which they were used with entire satisfaction. As I have seen little literature on this particular use of rubber gloves, I deem the time opportune to set forth their advantages.

*Read before the Michigan State Society at Grand Rapids, May 26, 1904.

Probably the greatest enemy the physician has to encounter in his obstetrical work is so-called puerperal fever. I use the word advisedly and in its generic sense, covering the several causes which give rise in temperature more or less violent, and which contribute, more than anything else, towards mortality in the natural function of parturition.

I do not claim that the use of rubber gloves alone will prove a panacea for puerperal fever, but I do maintain that they are a prophylactic, and my experience proves, to me at least, that any such aid is not to be regarded other than as a benefit to mankind.

I shall cite a number of cases in the experience of some of our best authorities, to show that to a very large extent, in their opinion, the contagion or infection is brought to a lying-in patient by the physician himself.

Dr. Gordon, of Aberdeen, gives his experience on this subject in no uncertain way, neither does he spare himself just criticism. He says: "The disease seized such women only as were visited or delivered by a practitioner or taken care of by a nurse who had previously attended patients affected with the disease." He adds, "It is a disagreeable declaration for me to make that I myself was the means of carrying the infection to a great number of women."

Dr. Armstrong, speaking in his work on this subject and more particularly of the prevalance of the disease among the patients of a single practitioner, says that of 43 cases at Sunderland, 40 cases were seen by Dr. Greyson and his assistant. Speaking of his personal practice he says that he "Must declare that it is very probable the contagion was conveyed in some instances by myself, though I took all the precautions then known to prevent such an occurrence.

"Omitting particulars, then, I will content myself with remarking generally that from more than one locality I have received reports of the prevalence of this fever in the practice of some individuals, while its occurrence in that of other physicians in the same neighborhood was not observed. Some have lost ten or twelve or even a greater number in almost unbroken succession. The infection seems to have stalked behind them like an evil spirit wherever they went. I had rather that those I esteemed the most should be delivered unaided, in a stable, than that they should receive the best help in the finest chamber if exposed to this pitiless disease."

When a large number of these cases appear in a single locality, as in a hospital and not elsewhere, this is generally considered proof that some *local* cause is there active in its production. I shall not enter into a discussion of any particular mode of infection, whether it is by the atmosphere the physician carries into the sick chamber or by direct application to the absorbing surfaces with which his hand comes in contact. It seems almost unnecessary to go into detail to prove the bacterial origin of this disease, as there are few if any American practitioners who do not believe in this doctrine. Copland takes this somewhat strong stand, and if he errs at all it is on the side of candor when he says: "Boards of Health, or where they do not exist, the medical institutions of a country, should have the power of inflicting some kind of punishment on those who recklessly go from cases of puerperal fever to parturient women without using due precaution and who, having been shown the risk, criminally encounter it and carry pestilence and death to persons they are employed to aid in the most interesting and suffering period of female existence."

The first who understood the septic nature of puerperal fever and instituted

an antiseptic prophylaxis "by means of chlorine" was Semelweis, of Vienna, in 1847. Still our present highly developed antisepsis is not derived directly from him. It was when Lister, building on the researches of Pasteur, had created antiseptic surgery in 1866 that Steadfeldt, in 1870, tried to adapt his treatment with carbolic acid to midwifery. From that time we can trace the rapid use of carbolic acid in obstetrical practice through Europe and America.

Bichloride of mercury was introduced by Tarnier and reported by him in a paper read before the International Medical Congress of London, 1881.

The way by which the micro-organisms enter in the vast majority of cases is through the genital canal. As long as the mucous membrane of the genital canal is intact, they are usually innocuous, but infection occurs when in consequence of the enormous distention and friction caused by the passage of the child, the vagina (particularly in instrumental delivery), becomes the seat of numerous abrasions or deeper wounds. Hence it is easily realized how the physician's hand can readily carry the infection to a field so exposed. The use of sterilized rubber gloves in these cases I consider an absolute necessity, and the fact that in my personal practice I have the statistics of over one hundred instrumental deliveries, with but a slight rise of temperature in a few cases, is certainly a strong argument for their use.

To my mind, if it is necessary to wear gloves in abdominal operations, then nature's great operation (child-birth) should be surrounded with the same means of protection, the lowered vitality of the patient, the loss of blood and the shock, only accentuating the necessity of availing ourselves of every means of protecting our patient from infection.

Bacteriology has long since proved beyond doubt that thorough sterilization can be accomplished only by dry or moist heat at a high temperature which conclusively abolishes all arguments in favor of mechanical or chemical sterilization of the hands. I will here lay special stress on the hand of the gynæcological surgeon who may operate on a septic case in the morning and be called to deliver a woman before evening.

To prove to my own satisfaction the practibility of rubber gloves I had several plate cultures made from my hands after the ordinary routine of office practice and from these plate cultures were isolated colonies of pathogenic streptococci, staphylococci and gonoccocci, I also found several anthrax colonies which I traced directly to a patient I had under treatment for malignant pustule; besides these were numerous colonies of pathogenic and non-pathogenic micro-organisms. This proved to me beyond doubt that my hands could not be rendered sterile by any means, mechanical or chemical.

While statistics show that the mortality in obstetrics has been greatly reduced, the gynæcologist is neverthsless constantly consulted to repair the damage done through infection contracted during labor.

I shall now add a case in point in my own practice. A man called on me one evening and on examination showed symptoms of erysipelas, but not in a marked degree. After retiring that night I was called to an obstetical case. In this case the labor was short and delivery natural. At eight o'clock the next morning I was called in a second case of obstetrics and was obliged to use instruments. Later in the same day I went to see the gentleman whom I had examined the night before; this time I found a very marked case of erysipelas. You can imagine my feelings, as my thoughts went flying to the two women I had delivered

since seeing him the first time. I watched for a rise in their temperatures, and gave a sigh of relief when the danger period had passed. I feel that those cases were protected by the use of rubber gloves. The same general statement will apply to autopsies or surgical treatment of erysipelas, and if unfortunately the doctor is obliged to combine such cases with his obstetrical work, he is in duty bound to use the highest degree of care and every means known to him to protect his lying-in patient.

The responsibility for the selection of the nurse rests largely with the physician, for the laity know little about the danger of infection while the doctor is in a position to know best what selection to make in order to minimize this special danger.

When trained nurses are employed in obstetrical cases, I have them pursue the following technique: the external genitals are thoroughly washed with germicidal soap, sometimes using the lime and soda as in ordinary laparotomy, then wash the vagina with the mild germicidal soap, which also acts as a lubricant for the instruments. Then when the patient is thus prepared, I put on a sterilized surgical gown and the rubber gloves before examining my patient or applying the instruments in cases in which they are necessary.

One of the strongest general rules that can be laid down, especially for young men just starting to practice, is, *keep your hands out of pus.* At first blush this may appear an impossible task to lay down for a man whose profession brings him so constantly near this common foe, but there are various ways in which he can effect his examination in a majority of cases without using his hands directly, and when he does let him beware how he uses them on obstetrical cases afterwards without the use of rubber gloves.

By following the above general rules I have had over one hundred instrumental deliveries with but an occasional rise in temperature. I have also noticed an entire absence of the so-called milk fever which usually appears on or about the third day.

The writer has seen six cases where he prognosed puerperal fever for some time before delivery. I have one case in mind where I saw the patient for the first time three days before delivery. She had had a twenty-minute chill and when I arrived I found a temperature of 105 and pulse 120. She had a normal delivery, her temperature dropped sub-normal and arose again to 104 which continued for four weeks. She had a pus tube, the debris of which I removed seven months afterwards. I cite this case to show that rubber gloves and other necessary aseptics are not always a guarantee against puerperal fever, as the deadly micro-organisms are sometimes implanted days, months and even years before conception.

In view of my own experience and that of several of my friends in the profession, it seems to me that at this date when asepsis may be said to be almost an exact science, there is very little excuse for the modern and up to date physician associating himself with puerperal fever. It has always been a question of grave consideration with me why the asepsis of obstetrics should be so slightly dealt with when the conditions, as we have seen, are so favorable to the destruction of life and health.

In conclusion, I do not wish to be understood as trying to instruct men older in the profession than myself, and probably much more skillful, but I feel they will join their voices with mine in any word that may help to promote greater care in eliminating a cause which is so prolific in the destruction of human life,

and especially of lives that are so valuable—that of mothers—whose loss affects so keenly not only the home, with its motherless children, but in a large measure may be considered a public calamity.

778 Jefferson Avenue.

A BRIEF HISTORY OF CYSTOSCOPY AND URETERAL CATHETERIZATION.*

BYRON ROBINSON, B. S., M. D.,
Chicago, Ill.

The cystoscope and ureteral catheterization apparatus should not be separated in the development of cystoscopy. The inspection of the bladder has always been accomplished with the desire and effort to catheterize the ureter.

The first cystoscopes were cylindrical tubes introduced into the urethra, while an extra-vesical mirror reflected light through the tube on the vesical mucosa.

Bozzini, of Frankfort, in 1806, was the first to invent the cystoscope, with an extra-vesical mirror reflector.

Segalas, in 1826, Bombalgini and John D. Fisher in 1827, invented modifications, but such instruments remained practically unnoticed.

Desormeaux (Endoscope and light in one apparatus), in 1856, and Cruise in 1865, introduced modifications of the cystoscope.

In 1867 the application of the glowing, incandescent platinum wire, in the illumination of cavities introduced an epoch of progress in the diagnosis of diseases of the tractus urinarius. It was the germ of the modern cystoscope.

Dr. Julius Bruck, Jr., of Breslau, in 1867, was the first to employ the glowing platinum light in medicine. He called his method stomatoscopy, direct illumination of a cavity by a glowing, incandescent platinum wire. It was diaphanoscopy, indirect illumination, or translucency of a cavity by a glowing platinum wire. Bruck cooled the glowing platinum wire by a stream of water.

In 1873 Stein employed an endoscopic tube through which light was reflected in the bladder.

In 1874 Gruenfeld introduced his instruments (das Endoscop), to which cystocopic progress is much indebted. Gruenfeld separated the endoscope and the illuminating power. In 1876 Gruenfeld perfected his method in the female. He introduced the endoscopic tube into the urethra and inspected the bladder. When he had succeeded he introduced the catheter externally parallel to the endoscopic tube and finally pushed it in the ureter. He was the first to practice endoscopic ureteral catheterization. Gruenfeld's endoscope consisted of a metal tube, blackened on its inner surface and having a plane of glass placed obliquely at its vesical extremity. Illumination was produced by a mirror. He devised a malleable or adjustable catheter, the proximal end of which could be bent at any desired angle while within the bladder.

In 1874 Dr. A. Tuchman, of the German hospital, in London, England, invented the "ureter forceps," a compression method, by means of which he attempted to obstruct intra-vesically one ureter in order to obtain urine separately from the other.

Gustav Simon studied and introduced the method of digital andmanual exploration of cavities. He was the first who succeeded in (1875) in catheterization or sounding the ureter of woman. He dilated the urethra and introducing the index finger, palpated for the inter-ureteric

*Written for the Detroit Medical Journal.

ligament and the distal ureteral orifice, whence, with the finger as a guide, he succeeded in ureteral catheterization with a metal catheter possessing a round end. Since his method of ureteral catheterization by the free hand excluded vision, non-intravesical illumination, it was called the fishing method, and was applicable to woman only. It also required narcosis.

Simon was successful fifteen times out of seventeen with the touch or palpation method.

In 1877 Max Nitze suggested that the bladder could be directly illuminated by passing an electric lamp into it. He therefore constructed an endoscopic sound, with Bruck's arrangement of lighting and cooling, to be introduced into the bladder. On a suggestion from Nitze to enlarge the field of vision, an optician, Beneche of Vienna, constructed a tube with a combination of lenses similar to those of a terrestrial telescope; hence comes the modern cystoscope. Nitze described this kind of a cystoscope at a meeting of the Medical Association of Vienna, March 9, 1879. In the Nitze instrument the intravesical outlet is located on the concave side of the beak, a commendable arrangement to avoid ureteral trauma.

Nitze introduced an epoch of progress in cystoscopy; he published an article in the Diagnostic Lexicon in 1894, but described his own instrument in 1895. The idea of the cystoscope originated with Nitze, however, it appears that Leiter, the instrument manufacturer, solved many of the mechanical problems arising during the construction. In 1903 the medical profession of civilized nations complimented Nitze by celebrating the twenty-fifth year of his introduction of the cystoscope.

In 1880 but two methods survived, that of Simon and of Gruenfeld. Simon's digital urethral dilatation, damaged the urethra anatomically and physiologically.

Gruenfeld's endoscope was limited in utility. Cystoscopy and ureteral catheterization almost ceased to progress.

In 1880 Pawlick described a method, based on anatomic landmarks of the bladder and vagina, for ureteral catheterization directly, without urethral dilatation or narcosis.

In 1886 Pawlick (at present professor in Prague, Bohemia, Germany) used the method of inflating the bladder with air and observed the vesical mucosa by the aid of solar light. He used the genu-pectoral position, introducing a Simon's speculum, which allowed air to distend in the bladder.

In 1887 he continued to practice cystoscopy and ureteral catheterization before students and physicians.

In 1888 Pawlick described his process of ureteral catheterization without preliminary operation, founded on his anatomic knowledge that the vesical trigone could be designated, however, with individual variation by a transverse fold across the ventral vaginal walls, making use of the impress of the vesical trigone on the vaginal wall. Pawlick successfully introduced into the ureter a fine metallic sound. However, it was extratechnical and too difficult a procedure to come into general use.

The trigone of Pawlick located on the ventral vaginal wall, due to the impression of the trigonum Lieutaudii was the landmark by which Pawlick catheterized the uterus, and being excluded from vision, it was termed the fishing method, similar to that of Simon. The celebrated gynecologist, Pozzi, of Paris, remarked it was a marvel what Pawlick could accomplish in catheterizing the ureters. Pawlick's work was an extension of the labors of Gruenfeld.

To collect urines from separate kidneys Vincenes Czerney, in 1881, preferred to create a fistula in the smaller pelvis, and collect urine from the ureter directly.

Notwithstanding the endoscope of Gruenfeld, ureteral catheterization was still difficult.

Silbermann, 1883, had the idea of a metallic catheter, with lateral eyelets. An elastic bladder filled with mercury forming a projection from the opening of the catheter,, which, by projecting, closed one or the other ureteral orifice by its own weight. Employing the suction pump, he drew away the mercury and the elastic bladder was forced into the window of the catheter. The weight to obstruct a ureter was 250 grains of mercury.

Polk, in 1883, compressed the ureter in man and woman by means of a syringe and the finger, introduced into the rectum.

In August, 1883, Newman of Glasgow, devised an electric lamp which he introduced into the bladder, containing boric solution. This method of vesical illumination exposed to view the ureteral orifices, and by the aid of a speculum he introduced an elastic catheter into each ureter, enabling him to collect separate urines from each kidney. Different methods were devised for securing urines from separate kidneys.

Harrison, 1884, proposed to proceed by perineal incision for ureteral catheterization and separate urines.

Hegar, of Freiburg, 1886; Sanger, of Leipsic, 1886, recommended temporary ligation of ureter to secure separate urines.

In 1886 Fenwick pumped the ureter with an eyelet in the syringe to secure separate urines.

In 1886 Rutenberg conceded the honor of the endoscope to Gruenfeld, to which Rutenburg added a canal for a catheter and a lateral fenestrum, window, in order to pass a small catheter. Rutenburg distended the bladder with air and by the aid of a mirror, he secured a view of the bladder. He also introduced a catheter (through a canal which he located in the shaft of the cystoscope.)

In 1880 the Edison incandescent lamp came in use and Dittel of Vienna began to infuse new life by employing it in cystoscopy about 1886.

In 1886 Leiter of Vienna completed a cystoscope in which the Edison incandescent lamp was employed.

Warkella proposed, 1886, to pass the ligature from the vagina around the ureter, not tying it, but exercising sufficient traction to occlude the ureteral lumen.

In the beginning of 1887 the problem of the cystoscope was solved.

Eberman, in that year, invented a compression forceps, one blade of which was introduced in the rectum and the other in the bladder, by which he compressed the distal ureteral end to obtain separate urines.

Weir, 1887; and Sands, 1887, both of New York, tried to compress the ureter per rectum, digitally.

Emmett, New York, 1887, suggested colpocystotomy for catheterization and separate urines.

Bozeman of New York worked at the same problem in 1888.

Iverson, 1888, succeeded in catheterization by a hypogastric incision. It was now attempted to have catheterization executed in view.

In 1889 Brenner thought to utilize electrical cystoscopy through catheterizing of the ureterus, adding to the tube of the cystoscope a canal for the ureteral catheter. The same year he modified Leiter's cystoscope by affiixing a fine canal on the lower border of the cystoscopic shaft to conduct a ureteral catheter. This device enabled physicians to catheterize the male ureters as reported by Zuckerkaudle and others. In Brenner's instrument the intra-vesical outlet of the ureteral catheter is located on the convex side of the beak, which is liable to produce ureteral trauma.

In 1889 Boisseau, of Rocher, advocated ideas similar to those of Brenner at about the same time.

In 1889 Brown, of, Baltimore, succeeded in catheterizing man, using the cystoscope of Brenner.

In 1889 Pourier successfully catheterized man, employing Boisseau's cystoscope.

In 1893 Dr. Howard Kelly, professor of gynecology in Johns Hopkins Medical School, Baltimore, Maryland, began his epoch-making publications on cystoscopy and ureteral catheterization. His first notable publication (1893) was entitled "The Direct Examination of the Female Bladder, With Elevated Pelvis—The Catheterization of the Ureter Under Direct Inspection, With and Without Elevation of the Pelvis." Kelly uses a cylindrical tube for direct vesical inspection and catheterizes the ureter directly through the inspecting tube with elevated pelvis by the aid of reflected light.

He employs the following instruments, viz.: Female catheters; a series of urethral dilators; a series of specula with obturators; a head mirror; suction apparatus for completely evacuating the bladder; urethral catheter, etc.

Kelly's method consists essentially of (a) atmospheric dilatation of the bladder secured by posture; (b) the introduction of straight, non-fenestrated, specula; (c) the examination of the vesical mucosa and distal ureteral orrifices by reflected light; (d) the introduction of the ureteral catheter through the urethral speculum.

The simplicity of Kelly's method generally popularized the subject of vesical inspection and ureteral catheterization. He has produced an epoch making work.

In 1904 he modified his plain tube in order to employ a cold electric lamp at its vesical end.

In 1893 and 1904 Pawlick and Kelly made known a complete system of cystoscopic examinations by the electric light method. These two authors described at the Roman Congress, April, 1894, an identical method of cystoscopy and ureteral catheterization. In America and England, cystoscopy is named after Kelly. In Germany, cystoscopy is named after Pawlick. It appears from historic data that Pawlick was the inventor, the pioneer, while Kelly popularized cystoscopy and catheterization. However, Kelly permanently impressed on cystoscopy his remarkable personality. Boari, the Italian urologist, says "Pawlick is the father of urethral catheterization." The right of priority is beyond doubt, and belongs to Pawlick.

The medical polemics of these two brilliant and gifted physicians—Pawlick and Kelly—as regards priority, become a journalistic event of the day. Both physicians rendered meritorious service to cystoscopy and urethral catheterization. Pawlick as a pioneer, hence more theoretically, and Kelly more practically, have contributed to the science of cystoscopy and catheterization of the ureter, modifying, developing and perfecting. However, Pawlick's publication (1894) was later than that of Kelley's (1893).

In 1895 (January 5th), Casper, presented to the Berlin Medical Society his uretero-cystoscope.

Willy Meyer, 1896, in a note reported that in 1894 Casper presented at the International Congress at Rome his instrument and also at the Reunion of Physicians and Naturalists at Vienna, 1894, and at the Congress of German Society in 1894, and that it differed from Nitze's. The priority of the uretero-scope belongs to Casper. In 1898 he made some modifications which especially related to prisms in his cystoscope.

In 1897 Albarran, of Paris, France, described a new cystoscope which he claimed presented technical advantages. He introduced flexible sounds for permanent catheterization.

M. L. Harris, of Chicago, 1898, introduced the urine segregator to secure separate urines from each kidney. A lever is introduced into the vagina or rectum of males, which presses the bladder in the median line or in the bifurcation of double catheter introduced into the bladder.

In 1898 Charles Preston invented the first cystoscope employing forced air vesical distention. In 1898 he invented the first cold electric cystoscope lamp.

In 1899 Bransford Lewis modified Preston's instrument and arranged it for catheterizing on the Brenner pattern. He demonstrated that catheterization of the ureter was practical by the air vesical distention method.

In 1899 Tildan Brown, of New York, modified Brenner's cystoscope by affixing to the shaft a double catheterizing apparatus in order to catheterize both ureters at one vesical introduction.

In 1901, Dr. Felix Schlagintweit introduced "Das Retrograd Cystoscope," completing it in 1903. This retrospective cystoscope furnishes a universal view of the vesical mucosa. It adds important views of the sphincter vesicae interum.

In 1902 P. E. Snell invented the first direct ureter cystoscope which enabled the operator to perform double catheterization through one catheter chamber, thus reducing the caliber of the cystoscope shaft five sizes. This cystoscope is commonly known as the Snell American instrument.

The same inventor modified the Air and Water methods of vesical distention, combining both in the same instrument. Snell devised the first acromatic lens employed in cystoscopy.

In 1902 F. Bierhoff modified the catheterizing apparatus of Nitze.

In 1902 William Brown, of Rochester, modified the Bransford Lewis cystoscope by arranging the catheterizing along the upper side of the shaft, which instrument was later unauthoritatively named the Ellsner cystoscope.

Kolman modified the Nitze cystoscope, claiming advantage in the irrigating apparatus.

O. Horwitz in 1003 devised an instrument for supra-pubic and perineal work with magnified field of vision.

In 1903 L. Schmidt and C. Kolischer modified the Brenner cystoscope, making the catheterizing apparatus removable as in the Casper cystoscope.

Lnys, of France, 1904, introduced a mechanical device for collecting separate urines, consisting of a rubber membrane with bilaterally attached catheter, which is placed on the stretch after it is introduced into the bladder.

CONCLUSIONS.

A hundred years includes all known work with the cystoscope.

The cystoscope has passed through two phases of development, viz.: First, the phase of indirect or reflected, extra-vesical illumination; second, the phase of direct or intra-vesical illumination.

The cystoscope of the first epoch consisted of a tube passed through the urethra into the bladder with the source of light reflected from an extra-vesical mirror. The source of the light reflected by the extra-vesical mirror was gas, petroleum (oil), gasogen, magnesium. The defect of the indirect or extra-vesically illuminated cystoscope was that the open tube allowed the bladder contents to escape on introduction, and the bladder walls consequently collapsed, limiting the time and field of observation. The employment of fenestrated tubes overcome this difficulty. All the above cystoscopes were limited in application to woman only—1890.

The cystoscope of the second epoch become provided with an intra-vesical electric light, direct, intravesical illumination.

There have been three groups of ureteral catheterization:

1. The catheterization by the free hand, the fishing method (Simond-Pawlick).

2. Endoscopy, (Gruenfeld, Pawlick, Kelley.)

3. Cystoscopy, (Nitze, Casper, Albarran.)

The basic principle of the modern cystoscope is the arrangement of an electric light on the vesical end of a catheter-like metallic instrument, with optical magnification of the field of vision by means of a prism, mirror and lenses.

The modern cystoscope is a complex apparatus, consisting of (a) a simple cystoscope; (b) cystocope with attached vesical irrigator; (c) a cystoscope with attached ureteral catheterizing apparatus; (d) an operating cystoscope.

The practice of cystoscopy is accompanied with limited pain, mmmmmm opportunity for trauma and few chances for infection.

Cystoscopy and ureteral catheterization are established as indispensible aids to diagnosis and treatment.

100 State Street, Chicago, Illinois.

Members of the Society of Chemical Industry, including a number of prominent foreign chemists, were visitors in Detroit on September 26 last. The party numbered 115 and was under the direction of William H. Nichols, of New York, the first American to hold the chief office of the society. The chemists have been visiting the industries of the chief American cities of the east and the middle west and have found much to interest them. They were the guests of Parke, Davis & Co. in the morning and were entertained at luncheon at the Russell house at noon.

Sir William Ramsey, K. C. B., D. Sc., LL. D., F. R. S., the retiring president of the organization, was in the party. He was recently knighted by King Edward for his contributions to scientific knowledge—notably his discovery of the new elements, argon, metargon, xenon and helium. He is also the holder of the Hoffmann medal, the highest honor in the gift of the German Chemical Society.

An item of news to physicians, as affecting the price of crude rubber, is from the *Wall Street Journal*, which announces that the price of that commodity is now at its highest price for over forty years, $1.23 per pound. This price even overtops the price made in the Vienna corner of twenty years ago. No artificial manipulation of the market is responsible for the present price, but the demand far exceeds the supply, with the inevitable result. The increase in production has been practically normal, but the immense demand for the commodity has forced the market, and higher prices of many of the rubber goods may be confidently expected. The automobile tire industry has cut an important figure in the whole matter.

A new anæsthetic, which works along somewhat novel lines, is reported from Switzerland, where two scientists have been working on the problem. Consul Liefelt, at Freiburg, Germany, reports to the state department that experiments have demonstrated that a tooth may be painlessly extracted after the eyes of the patient have been exposed to a blue light of sixteen candle-power for three minutes, the exposure taking place in a dark chamber. The anæsthetic is said to have no after-effects.

One of the results of the birth of an heir to the Russian throne is that women in that country are now given practically the same advantages in the matter of education and practice as are the men.

DETROIT MEDICAL JOURNAL

A MONTHLY EPITOME OF
PRACTICE AND THERAPEUTICS

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SUBSCRIPTION PRICE, $1.00 PER YEAR.
SINGLE COPIES, 15 CENTS.

NOTE.—We do not assume responsibility for the opinions of contributors.

The management cannot undertake to return rejected manuscript unless full postage for the purpose is submitted with the contribution.

Address all communications to 103 and 105 Miami Avenue, Detroit, Michigan, U. S. A.

Vol. 4. DETROIT, MICHIGAN, OCTOBER, 1904. No. 7.

Medical Education.

We have previously given considerable space to the discussion of this important subject, which is so fundamental a factor in the future of American Medicine.

It must be admitted that in the past our system in the main has been wofully defective and a comparison of American with European or even Canadian medical education could not but result to our disadvantage and discredit. Not that we had no good schools, but we had so many poor schools that the percentage of poorly educated men graduated was far too large. With no fixed standard of educational requirements or length of course and without state or governmental supervision a large number of proprietary or private medical colleges sprang into existence at the instance of little coteries of men who coveted the title and emoluments of professorships with little conception of the responsibilities assumed.

Many of these private institutions to be sure developed into strong and well equipped schools but many also were content to furnish a modicum of learning so long as students could be found who were satisfied with but little.

Within the last decade or so, however, much improvement may be noted in many of our medical colleges. The American Association of Medical Colleges, organized under the auspices of the American Medical Association, established definite minimum requirements of curriculum and length of course, and gradually the whole profession with the support of the people has become insistent that medical students shall be graduated well equipped as regards preliminary education and scientific training and rigid laws guarding the entrance upon he practice of medicine, are now in force in most states. Then the development of the specialties has made laboratory and clinical teaching far more essential and greatly increased the cost of production of the medical graduate and necessitated increase in tuition fees. These factors then of better preliminary education, lengthened term of medical study, increased tuition and laboratory fees, with a thorough state inspection guarding the goal may be expected to materially discourage many who in the past would have studied medicine and made "poor doctors." If the course of study is long, hard and expensive, fewer men will undertake it and the per capita percentage of medical men may be expected to gradually approach more nearly the actual requirements of the public, with a resultant better living and better standing in the community for the medical profession.

The future of many of the smaller private colleges for which there was never any real need is a matter of doubt dependent somewhat upon the pertinacity of their managing boards and their ability to improve the equipment and curriculum sufficiently to enable their students to qualify for practice before the State Registration Boards with their coming

unanimity of custom in requiring examination of all applicants regardless of the school of which they are graduates. The schools whose graduates cannot practice after graduation will soon have vacant benches and empty halls. In our own State we have recently seen the consolidation of two schools and hope and expect to see more.

Bellevue has amalgamated with Cornell University, Rush Medical with the University of Chicago and the Chicago P. & S. with the University of Illinois.

Universities with their endowment or State aid are splendidly adapted to teach medicine as a part of their broad educational plan.

What a grand medical department the University of Michigan would have with its laboratories in Ann Arbor, and its clinical teaching in Detroit, with the enthusiastic support and encouragement of a united profession in Detroit!

The Prevention of Typhoid Fever.

At this time of year the attention of physicians, health officers and sanitarians naturally turns to the consideration of this wide-spread scourge,, a disease which is, or should be, absolutely preventable.

Dr. Wm. G. Daggett, in a paper read before the Connecticut State Medical Society and now circulated by the Connecticut State Board of Health, strikes at the root of the evil in advocating rigid sanitary supervision of the rural districts. He says:—

"Typhoid caused by the *bacillus typhosus*, an organism which exists in large numbers in the stools and urine of patients, and which may persist for months, or even years, in the urine after the patient is discharged as cured. It may also be harbored by healthy individuals.

"Patients receive the infection by the mouth in water, milk, or food. Water is infected in wells or streams from the dejecta of some case; milk by the use of polluted water in dilution, or in washing the containers; oysters by being placed near the mouths of sewers to fatten; food, cooked or raw, by water, dust, or flies. Every case is potentially a focus from which hundreds of others may develop.

"To combat these conditions we establish filtration plants for the water-supplies of large centers of population; we encourage the domestic filtration of water; and in times of manifest danger advise the boiling of water used for drinking purposes. Our health officers search for the foci of epidemics and effectively isolate them. We preach and practice the disinfection of the excreta of every recognized case, and we disinfect too the bedding, clothing and utensils used by the patient. These measures are absolutely necessary and must be carried out with the utmost care.

"But our system is seriously defective in that, except as regards the filtration of water, it deals with cases only after they have been diagnosed, and until they are thought to be powerless for harm. We should also consider these cases before precautions are commenced and after they have been discontinued; and in addition the very large number of unrecognized cases. To strike at the root of the matter we should not wait until sickness appears, but should anticipate the occurrence of infection. This can be done only by *comprehensive rural sanitation*. With the state thickly settled, with milk and vegetables brought from every direction to the towns and cities, and with the larger centers of population reaching out farther and farther for their water supplies, we must now look upon even the remote rural inhabitant as a neighbor, and take a lively interest in his well, his yard, and in the brook that traverses his farm. By waging an effective warfare at

this hitherto neglected point we can prevent the pollution of water and milk, and the conveyance of infection by dust and flies. The rural privy is the original plague spot, although casual deposits of infectious excreta may at times play a part. The location of the privy is usually based solely on considerations of convenience of access and a moderate degree of privacy, little or no thought being given to the direction of the flow of the ground water. The building is seldom cleaned, rarely screened, and the vault is never disinfected. It should be very carefully located, thoroughly screened to keep flies away, and *disinfected daily whether or not there is sickness on the premises.*

"It is in truth a herculean task to accomplish a reform involving so much perplexing detail, but the task is insignificant when compared with the evil which its accomplishment would in a large measure avert. It must be done sooner or later, and when it has been put into effective operation the wonder will be that it was not sooner undertaken.

"The first step in bringing about the reforms suggested should be the formulation of the best practicable methods of keeping privy vaults in a sanitary condition. The next, the appointment of a number of civil engineers as a permanent force of State Sanitary Inspectors whose duty should be to make a complete sanitary survey of the state, with power to condemn improperly located or improperly managed privies. They should also instruct the people as to the best use of screens, the care of manure heaps to prevent the breeding of flies, and the general sanitary management of stables and yards. They should make frequent rounds of their respective districts, and should report at stated times in writing to their Superintendent. The whole matter might well be placed under the control and direction of the State Board of Health."

These are suggestions of great practical value which every State Board of Health would be glad to put in force if empowered to do so.

The time will certainly come in this country when under national supervision sanitation and public health matters will receive the attention in every community which they merit. Preventive medicine is as yet in its infancy in this country and much can be done by progressive Health Boards to eliminate or at least materially lessen many preventable diseases. Why should not Michigan lead the way?

Prophylaxis.

Dr. Campbell's article in this issue takes up a question that is fast becoming one of the very first importance with every thinking physician. In the present age it is not what a practitioner is able to cure so much as it is what he is able to prevent that marks him as a benefactor. Civilized peoples are coming more and more to feel that there is much sound sense in the policy of the Chinese, who pay their physicians only while they are well. The heathen are fair enough to their doctors to live carefully, and to call upon their medical men to cure only those maladies which result from conditions outside of the patients' control. After all, the prime object of a physician's existence is to keep his patients in health; when they fall into a state of illness, it is his business to restore them to health as speedily as may be.

When a patient seeks his physician, the latter, in addition to prescribing for him, gives him certain suggestions as to his mode of life which will add materially in his restoration to health; if the patient is sensible, he will continue to live in the manner prescribed, avoiding forbidden things, and in almost every case avoiding a recurrence of the original trouble. If

the physician could have laid down his advice before the appearance of the malady, and the patient had followed it, the chances are strongly in favor of the supposition that it would never have appeared at all. Multiply this condition and extend it to a community instead of a patient, and you have prevented a large amount of illness. Dr. Campbell's suggestion is eminently sane and admits of easy practice; the difficulty is to get possible patients to live up to it. Public education is needed in this, as it is in every other important public reform. People are far too prone to getting along with the economy in a condition only slightly out of order. It is not until pain or suffering in sufficient degree has made its presence that the patient seeks relief. By that time, in many cases, the malady has progressed until long treatment, with a possible operation, is the only method of restoring normal conditions.

Men habitually treat their bodies with scant respect. The poor flesh has to bear many burdens laid upon it by unwise life, and the wonder is that it does not more often rebel. Physicians are, as a class, men of excellent health, not because they take much medicine, but because they have learned how to treat their bodies. It is their duty to show others the right way of life, and when opportunity arises they do so. Dr. Campbell's suggestion is one which, if carried out in general practice, will be productive of the most excellent results. We should like to see it come into universal honor and use.

Neils R. Finsen.

Neils R. Finsen, who has been large in the eye of the profession for a number of years past, died at Copenhagen, Denmark, on September 24 last, and in his passing a remarkable man has left the stage of action. His death was not unexpected, for he suffered from chronic and incurable disease, but in spite of the fact that he was well aware of his condition he continued to work until the last moment allotted to him.

To Finsen, more than to any other one man, is due the development of phototherapy along scientific lines, until it has become definitely established as a successful means of treatment for lupus vulgaris. He pluckily persisted in his studies until he reached their consummation in the method of treatment which now bears his name. At an early date he saw that to make use of the great forces existent in light would require exhaustive experiments regarding its physical, chemical and biologic nature, accompanying clinical work on patients. He gave his trained attention to the matter, and his earliest published articles on light and its action on the animal organisms were issued in 1893. Three years later his researches had progressed to such an extent that he felt justified in establishing the institute in Copenhagen. This was the result of public and private support, and almost from its inception it met with success. It has been greatly enlarged since its opening.

With the true scientific mind, Finsen began the issuance of a series of reports in 1899, showing the work of the institute and what had been accomplished there. These were of inestimable value to the medical world, and in addition to this work Finsen wrote a number of monographs on his subject in Danish, French and German. In these were considered the role of the chemical light in medicine and in biology and treatment of lupus by the concentrated chemical rays.

In the report which covered the treatment of the first 800 cases at the institute, embracing the period from November, 1895, to November, 1901, it was shown that 407 were cured, 85 had inter-

rupted treatment, and 308 were still undergoing treatment. In this report, which is a model of clearness and of scientific expression, the author was careful not to make any extravagant claims for the treatment; he simply gave carefully tabulated and detailed reports, from which the profession were able to draw their own conclusions.

It is to Finsen that credit for having placed the matter of phototherapy on a firm and scientific basis belongs. This he accomplished by constant effort, going slowly but surely, and making sure of every step before he announced it to the profession. He was habitually conservative in his estimate of what might be accomplished, and his personal manner was one of unselfishness and modesty. He was a high type of the physician; although he had every opportunity to increase his worldly goods, he neglected them. When he was awarded the Nobel prize in medicine in December of last year he turned the money over to the institute, to further the work, and this was a type of his actions. He has left a lasting personal impression on the profession, and his work will stand as one of the important achievements of modern medicine.

The Physician in Politics.

Dr. Joseph H. Chandler, of Centerville, Delaware, has been nominated for governor on the Republican ticket.

Dr. Wm. M. S. Beebe, of Stockton, California, has been nominated as a Democratic presidential elector.

Dr. Richard S. Hill, of Prince George County, Maryland, has been nominated for Congress.

Dr. D. M. Nottingham, of Lansing, Mich., has been renominated for the legislature.

Drs. O. T. Toepel, B. Morgan Parker and several others are candidates for the nomination for coroner of Wayne County.

EDITORIAL NOTES.

Many things that sounded suspiciously like good common sense were said in a paper by Dr. Ernst J. Lederle, formerly commissioner of health of New York, read in Dr. Lederle's absence at the recent meeting of the international Congress of Arts and Sciences held at the World's Fair last month. The paper read in part as follows:

"Sanitary science has been for so much of its brief existence set forth almost wholly by medical men, that it is still widely regarded as their peculiar province. Preventive medicine is the watchword of the new school. It is a sign of the progressiveness of that school that in all enlightened communities it has realized the great scope of the preventive work to be done and has called into existence a new profession, that of the sanitarian, in order to have the aid of specialists in hygiene in solving the problems of disease.

"This leads me to a statement of what I believe to be the best possible organization of a sanitary service, municipal, state or national, and one which I hope some day will be adopted not only in cities and states, but by our federal government. At its head should be a board of administration, consisting of a physician of the first rank, skilled in the application of bacteriological and general medical research to the problems of hygiene; a trained sanitary engineer; and third, if you like, as a balance wheel to prevent the eccentricities of the specialists from disturbing the workings of the machine, a man of affairs in the broader sense of the word, who should be versed in sanitary practice and at the same time chosen mainly for administrative skill and for a certain practical common sense which might guide such an organization wisely.

"In the service of such a department of

our government there should be a staff of specialists in every branch of medical and sanitary science, laboratories equipped for research and diagnosis and all other adjuncts which make for efficiency in public hygiene. One may question how such a body would be regarded by the existing sanitary authorities of cities and states, but to my mind it would be entirely feasible to co-ordinate all the minor divisions of sanitary service to one comprehensive whole, in which the central body, though maintaining its position of leadership, should exercise police powers with extreme caution while developing its advisory function to a degree of usefulness beyond any yet attained.

"Another field of usefulness for a national board of health would be the training of sanitary officers. Sanitary science is so new and the public appreciation of its benefits still so small that the rewards for the pursuit of it as a life occupation are not sufficient to induce enough good men to make it a study.

"The greatest of all the present problems confronting boards of health in this country, I have no hesitation in saying, is the responsibility of preserving the sanitary service from the evils of partisan politics. The politician is nearly always the bitterest opponent of sanitary reform, because nearly every order for sanitary betterment touches the pocket of some of his constituents, who immediately run to the politician for relief. There will never be a radical improvement in this condition until our sanitary offices are taken out of politics and the incumbents appointed for life or during good behavior."

Touching the matter of the prevention of tuberculosis, he said:

"One of the most hopeful signs of progress in popular appreciation of sanitary endeavor is the general interest in methods for the prevention of tuberculosis. Medical men are everywhere agitating for better facilities to fight this disease, the worst enemy of the human race, and lay associations are taking steps to establish sanitariums for the reception of patients. This work is a stupendous one and we have thus far only touched its edge. Efforts to discover a serum for the cure of the disease, though thus far disappointing, have increased medical knowledge of the subject.

"It is not enough that the world should wait on the researches of the bacteriologist. Our cities are full of consumptives, spreading infection among their fellows in spite of all efforts of the sanitary authorities to instruct them in personal precautions. We must have sanitariums and hospitals of large capacity for the reception of cases in all stages of the disease. The cost will be great, but tuberculosis claims most of its victims at a time when their usefulness in industrial pursuits is greatest, and it can be amply proved that the cost of their care and cure would be small indeed in comparison with the loss the community suffers in being deprived of their services. Money spent in erecting and maintaining sanitariums would be saved in almshouses and orphan asylums.

The thirty-seventh annual meeting of the Canadian Medical Association was held at Vancouver, B. C., August 23-26, and proved one of the most successful and largest meetings in the history of the organization, there being registered 266 physicians. The address in surgery was delivered by Dr. Mayo Robson, and was accompanied by a lantern demonstration; that in medicine was delivered by Dr. Robert E. McKechnie, Vancouver, and that in gynecology by Dr. E. C. Dudley, Chicago also accompanied by a lantern demonstration. The election of officers resulted as follows: President, Dr. John Stewart, Halifax, N. S.; vice-presidents,

Drs. Peter MacLaren, Montague Bridge, P. E. I., Judson B. Black, Windsor, N. S., Alfred B. Atherton, Frederickton, N. B., Joseph E. Dube, Montreal, Harry Meek, London, Ont., W. S. England, Winnepeg, Man., Henry C. Wilson, Edmonton, N. W. T., and Richard E. Walker, New Westminster, B. C.; local secretaries, Drs. Henry D. Johnson, Charlottestown, P. E. I., Guy C. Jones, Halifax, N. S., Thomas D. Walker, St. John, N. B., John D. Cameron, Montreal, Alexander Stewart, Palmerston, Ont., Samuel W. Hewetson, Pincher Creek, N. W. T., Popham, Winnipeg, and Alexander S. Monro, of Vancouver. The 1905 meeting will be held in Halifax.

Dr. M. H. Biggs, chief resident physician of the Philadelphia hospital, has induced the municipal authorities to erect six pavilions, at a cost of $114,000, for the purpose of giving a thorough test to his treatment of consumption by sunlight. Each pavilion is twenty-seven feet wide and thirty-six feet long, surrounded by a six-foot porch, which, like the pavilion, is enclosed in glass. Automatic devices provide for throwing open the buildings to the air, so that they may be converted into sheds with glass roofs. The glass enclosing the pavilion proper is ribbed so as to make it opaque, but that of the porches is transparent. With each pavilion and connected to it by a glass-covered porch, is an auxiliary building, containing a kitchen, bath and toilet rooms, and in the basement a heating and ventilating plant. All floors are of cement, as smooth and non-absorbent as possible.

Dr. Rufus B. Weaver, professor of anatomy at the Hahnemannian College, Philadelphia, has accomplished a wonderful feat of patience. He has prepared a complete skeleton of the human nerves, using the original material, and has mounted it in permanent manner. A photograph of this remarkable chart has been sent to the museum of medical curiosities at Lincoln's Inn Fields, London, where it has excited much attention.

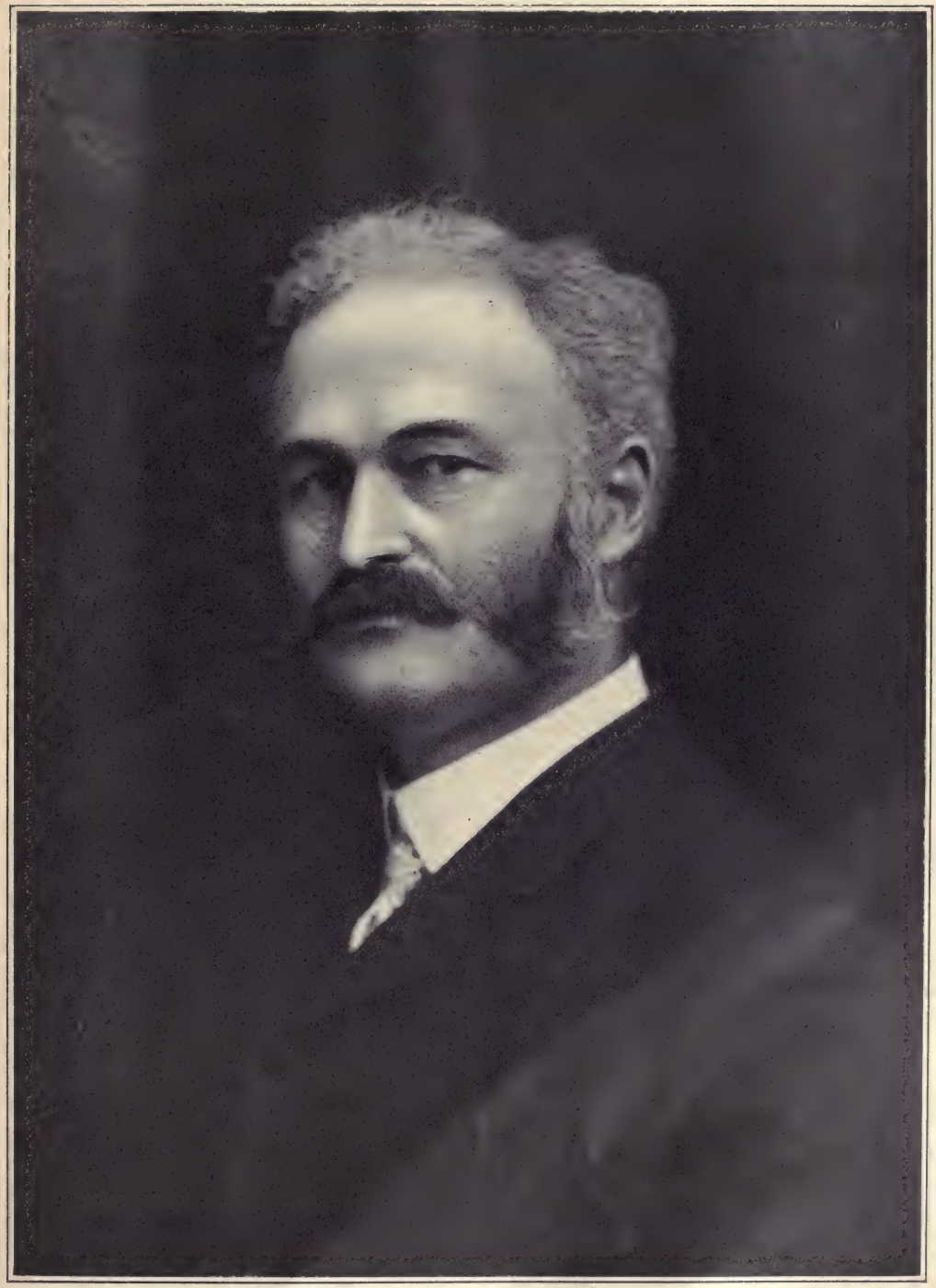
The American Association of Obstetricians and Gynæcologists, in session at St. Louis, Mo., the second week of September, elected the following officers: President, D,. H W. Longyear, of Detroit; vice presidents, Drs. David Tod Gilliam, of Columbus, Ohio, and John Young Brown, of St. Louis, Mo.; secretary, Dr. William Warren Potter, of Buffalo; treasurer, Dr. Xavier O. Werden, of Pittsburg. The association will hold its next meeting in New York City in September, 1905.

This organization, although its members are few in number, is regarded as one of the most progressive in the country, and election to its chief office is considered a great honor. Its members have paid a deserved compliment to Dr. Longyear and to Detroit.

Sir Frederick Treeves, the eminent English Surgeon, who visited the United States early in June, received the Honorary degree of LLD., from the University of Pennsylvania.

Prof. Pozzi, the famous gynecologist of Paris, and Editor of "The Review de Gynaecologie," came to America to attend the Congress of French speaking Physicians, held in Montreal June 28th.

Thirteen State Medical Societies are now publishing their transactions in the form of monthly journals, namely: Arkansas, California, Colorado, Illinois, Kansas, Kentucky, Michigan, Mississippi, Missouri, New Jersey, New York, Pennsylvania, and Wisconsin.



H. W. LONGYEAR, M. D., PRESIDENT

OF THE AMERICAN ASSOCIATION OF OBSTETRICIANS AND GYNÆCOLOGISTS

NEW INSTRUMENTS AND DEVICES.

Mention of new instruments and devices in this department is entirely complimentary and articles illustrated are judged on their merits.

We invite manufacturers and physicians to send us matter suitable for publication under this head. A description of the device and an electrotype or half-tone with a base not greater than two and five-eighths inches should be sent.

Always mention the price of the article in question.

The management cannot undertake to return cuts unless postage for same accompanies the letter with which they are sent.

Seamless Edge Physician's Bag.

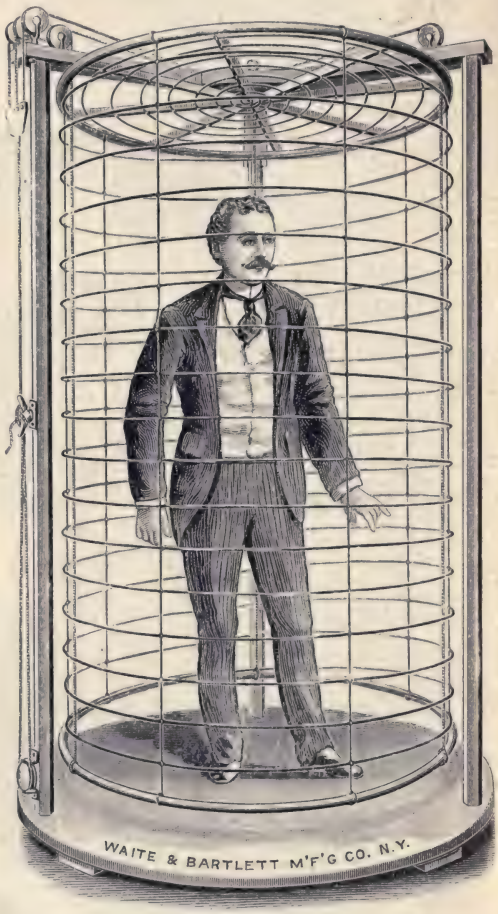
This bag embodies several new features, among them one that will undoubtedly appeal to many practitioners. It consists of a space formed between the bag proper and a false bottom. This space is 6¾ inches in width and 3

inches in hight, extending the length of the bag. It forms a handy separate compartment for pan or sterilizer and is very easy of access. As the cut shows, one end of the bag is fitted with double flaps and there are two brass catches for entire security. The peculiar methods of construction in this bag successfully overcome the undesirable features of the telescope bag and the tilting top bag.

It retails for $9.00.

Piffard Resonator.

This piece of high-frequency apparatus has been brought out by the manufacturers within the last few months. It is based on the large solenoid or cage of D'Arsonval, the device from which his classic auto-induction is obtained. To this, at the suggestion of Prof. Piffard, an upper spiral or roof has been added, in this way converting the cage into a resonator.

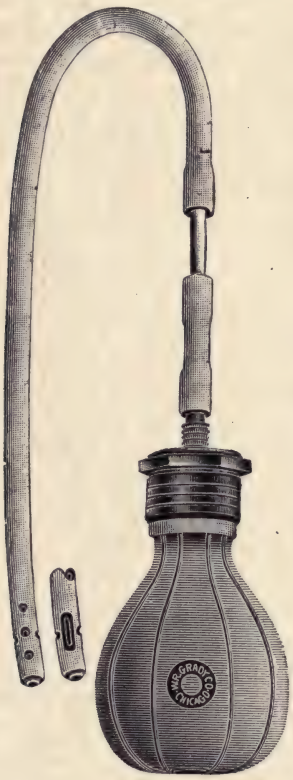


This happy addition enables one to obtain either the D'Arsonval or the Piffard resonator current at will, the nature of the current being dependent upon the manner in which the apparatus is connected to the static machine or coil. Since the value of the high-frequency currents is no longer a disputed fact, owing

to their wide-spread vogue in Europe and the interest which has attached to them in America for the past few years, the illustration of one of the latest modes of their application should be of interest to the profession.

Ewald Stomach Evacuator.

A handy means for use in obtaining stomach contents for diagnostic work. It consists of an Ewald tube, connected



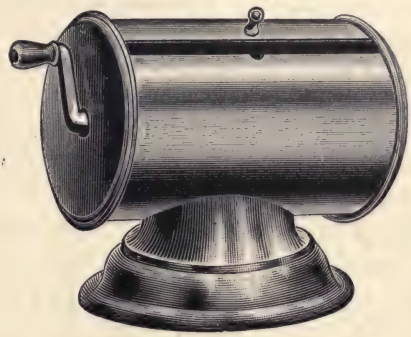
by glass tubing to a small, soft rubber fitting, attached to a conical piece of hard rubber which fits snugly into the bulb proper. The bulb itself is made of extra heavy resilient rubber, with hard rubber fittings, and the opening into the bag is purposely made large to admit of its being easily cleansed.

It answers admirably the purpose for which it has been designed, and it retails, complete, for the sum of $6.50.

Rotary Cotton Reservoir.

This antiseptic cotton holder was designed by Dr. C. Y. Hogsett, of Dallas, Texas, and is intended for use in the treatment of the eye, ear, nose and throat.

Its nature is readily understood from the accompanying illustration. On a



leaded metallic base there rests a double cylinder of a size to take in the smallest size package of absorbent cotton. Through this passes a square steel rod and a crank is attached for turning same. On this is wound the cotton from the package, just as a bandage is wound on a roller, and the device is ready for use.

The inner portion of the double cylinder is movable, and when the knob shown is pulled down the reservoir is made dust-proof, so that the cotton is always protected from the impurities of the air. The cotton is wound in the direction of the long fibers, and comes off the roll readily, without matting or twisting, so that it may easily be wrapped about an applicator. The reservoir may be conveniently sterilized in a short time.

The price of the device, complete, is $2.00.

At the last meeting of the Canadian Medical Association, that body passed a resolution asking the government to control the sale of patent medicines, on the ground that most of them contain alcohol and are a menace to health. The government was also asked to appoint a federal health board for the ensuing year.

PROGRESS OF MEDICAL SCIENCE

Digitalis in Cardiac Disorders.

Sajours (*Monthly Cyclopedia of Practical Medicine*, September, '04), in a brief practical paper on this topic, concludes as follows: "These few facts are submitted mainly to emphasize the underlying principle which should, it seems to me, govern the clinical use of digitalis, namely: Its *indirect* influence, *through the adrenals*, on the heart and vasomotor system. The practical bearing of this principle may be illustrated by the following few examples:—

"1. In uncomplicated dilatation of the heart, failure of the cardiac muscle to contract adequately, *i. e.*, in loss of cardiac *power*, the secretion of the adrenals would logically be indicated, since we have seen that, as does suprarenal extract, it increases this power to a greater degree than any agent known. We know that this is precisely where digitalis is at its best, particularly when the *right* heart is dilated—the side first reached by the adrenal secretion.

"2. The word "uncomplicated" must be qualified here, however. We have a valvular lesion with dilatation, the heart doing its best to do its work notwithstanding the obstruction. Yet the increased resistance—mitral in most cases—keeps it dilated, and the organ is already showing *slight* signs of hypertrophy. It requires help—more "dynamism," as Brown-Séquard called it fifty years ago when he advanced the view that the main factor of the heart's contractile energy was in its *venous* blood. What greater help could we give it than the secretion of the adrenals, its main source of contractile power? Digitalis, we know, is of great value just in such cases.

"Mitral stenosis or insufficiency are types of cardiac disorders to which reference has just been made. Yet in many instances the valves of both sides of the heart are diseased and passive resistance to the admission of blood to the *right* heart occurs, causing passive hyperæmia and venous stasis. The secretion of the adrenals raises the general vascular pressure, thus forcing more blood *toward* the heart; and *slows* cardiac action,—thus giving it more time to dilate and to admit more blood. The relief digitalis affords in such cases is well known.

"4. Conversely: We have to deal with a heart which has reached the stage of full compensation: *i. e.*, hypertrophy. It has succeeded—too well perhaps—in mastering the valvular obstruction in the sense that it has acquired the power of forcing a relatively adequate proportion of blood past the obstruction. Would an increase of adrenal secretion in the blood, which would raise the vascular pressure, *i. e.*, the peripheral *resistance* to the circulation of blood, and thus increase the labor of the heart, benefit such a case? We know that digitalis is harmful under these conditions, and that it can actually promote hypertrophy.

"5. The case is one of arteriosclerosis, with more or less advanced calcification of the aorta and of the coronaries perhaps, and also of a few or many arteries (of undeterminable limits in the living subject),—all complicating a cardiac disorder. The pulse is hard and small, indicating circulatory resistance somewhere. Would an agent such as the secretion of the adrenals, which increases

the general vasoconstriction and, *simultaneously*, the power of the heart's contractions—thus greatly augmenting the centrifugal pressure of the blood-stream—be indicated? Digitalis is known to be unsafe in such cases.

"6. The case is one of aortic regurgitation. Owing to a lesion of the aortic valves, a reflux of blood into the ventricle occurs during diastole. The adrenal secretion, by *slowing* the heart, would lengthen the diastole and afford more time for regurgitation; again, by causing general *vasoconstriction*, it would increase the resistance to the blood-current and help to detain the blood in the ventricle. Would it not tend greatly to increase the trouble—as does digitalis?

"Other illustrations might be vouchsafed, but they would sustain the view I ventured to advance some time ago,—viz.: that 'digitalis is probably the most perfect cardiac stimulant of our pharmacopœia, but only because, better than any drug, it enhances the activity of the pituitary body, which, in turn, so stimulates the suprarenal glands as to bring them to their highest functional possibilities.'"

Chloride of Ethyl in Obstetrics.*

Dr. Plauchu, chief of the obstetrical clinic, at Lyons, France, writing in the *Lyon Médical*, strongly recommends the administration of chloride of ethyl in obstetrics, where general anæsthesia is desired. His observations cover the period of use from the introduction of this agent in this manner by Hacker, at Insbruck, in 1898, through the use of Malherbe, Lepage and Le Lorier. He says in part:

"Chloride of Ethyl may be employed in obstetrics in two principal methods, either as exclusive anæsthesia for very rapid interventions, or to commence an anæsthesia which is then continued with chloroform or ether.

"I. In the first case the anæsthesia effect may, if necessary, be prolonged during three or four minutes, by using a second dose of ten cubic centimeters. We have never tried to prolong it further, for if the operation requires more time it is better to continue with ether or chloroform.

"It may be employed alone for a painful obstetric examination, such as we frequently have to make in nervous primiparæ in whom there is symptomatic or essential vaginismus, or in cases where there is a contraction of the pelvis which must be carefully analyzed. It is also useful in a number of little procedures which are not really painful, but which the nervous susceptibility of the patient suddenly renders complicated. We have used it three times for the introduction of Krause's bougies and Champetier's bulb in a pregnant woman who became violently agitated at every attempt to examine her.

"Consciousness is regained very rapidly and the patient can get up at the expiration of a few minutes. She does not have an unpleasant remembrance of the rapid administration of the anæsthetic.

"II. It is much more frequently indicated in obstetrics to commence anæsthesia by the administration of chloride of ethyl and to continue it with chloroform in case the infant is failing or in imminent danger of death so that a rapid extraction by the breech or a version is necessary, or when there is a prolapse of the cord, observed it may be at the moment of the rupture of the bag of water and coincident with a green discoloration of the amniotic fluid. Likewise in application of the forceps indicated by profound modification of the sounds of the fetal heart which make it appear that the child is

*From Annals of Gynecology and Pediatry, September, 1904.

likely to die before or during the operation. Every moment lost endangers the infant and there is a gain of five to ten minutes in accelerating anæsthesia by this method.

"It is also advantageous to commence the anæsthesia by the inhalation of chloride of ethyl and to continue it with ether in certain maternal hemorrhages following accouchement (laceration of the cervix, of the vagina or of the inferior segment) continuing after delivery and necessitating for instance a uterovaginal tamponment, also in artificial delivery either post partum or post abortum, with important hemorrhage. Finally in the extraction of membranes retained after accouchement."

A Substitute for Rubber Gloves and the Adhesive Rubber Dam.

J. B. Murphy (*Journal A. M. A.*, September 19, '04), again calls attention to the use of an impermeable coating of gutta-percha solution as a protective for operator and patient, having demonstrated by a series of bacteriological tests the efficacy of the measure.

A four to eight per cent. solution of gutta-percha in benzine or acetone is used, the benzine solution being applied to the hands, the acetone solution to the field of operation, the benzine solution having proven the best for wear while the acetone solution is more quickly applied.

The method of preparing the rubber solution is as follows:

1. Care must be taken to cut the gutta-percha chips in small pieces.

2. Wash in formalin, full strength, and dry.

3. Macerate the chips in benzine or acetone for three days, then filter through cotton which has been in formalin vapor for 48 hours. Repeat the filtering twice and then the solutions are ready for use. The benzine is sterilized by boiling it in a water-bath in a strong, securely corked bottle. Repeated culture tests of the solution prepared in this manner all proved sterile; 1 per cent. carbolic acid may be added without producing irritation of the skin, but is unneccessary.

The best method of applying is by dipping the hands into a small basin containing the solution. It should be worked in around the nails and tips of the fingers, and should be applied as high as the elbows. Between operations the hands may be washed with soap and water, spirits of soap, alcohol, bichlorid, carbolic acid or formalin solution, without interfering with the rubber coating. Brushes, however, should not be used. After cleansing the hands and before proceeding with another operation, the fingers are redipped, as the coating wears off, but one application on the hands and forearms is sufficient for the entire day. The skin of the operator does not become "water logged" or shriveled with the solution, as it does with the rubber gloves. The coating is best removed by washing the hands in benzine and drying rapidly with a towel.

Care must be taken to have the solutions fresh as they deteriorate if kept long in a hot room.

Experimental Decapsulation of the Kidneys.

Gifford (*Boston Med. and Surg. Jour.*, July 14, 1904).—As a result of a year's work on experimental decapsulation the author draws these conclusions:

Following the decapsulation of kidneys in rabbits, in normal dogs, in dogs with induced nephritis, in dogs with infected kidneys, and in dogs with normal kidneys but with additional work thrown upon them, I find the following conditions:

1. In all my cases of two days and under and in my controls the entire thick-

ness of the capsule had been removed over two-thirds of the surface by the operation of decapsulation.

2. There is a certain amount of intracapsular tension in undecapsulated kidneys, normal or with nephritis, as shown on removal of capsule.

3. There is an immediate increase in size of decapsulated kidneys persisting up to one month at least; afterwards, a decrease to approximately normal size complete at end of six months.

4. There is congestion, moderate in degree, most marked in the inter-tubular blood vessels in cortex, lasting three to five days after the operation.

5. No histological change in the renal epithelium follows the operation of decapsulation of kidneys.

6. A new capsule, very vascular, at first, two to four times thickness of old, is well marked at end of eight days. At the end of six months it returns to approximately the normal thickness and vascularity. The new capsule arises chiefly from the connective tissue cells of the intertubular connective tissue, but in part from the retroperitoneal connective tissue which is present in the new bed of the kidney.

7. No new vessels are formed which anastomose with those of the kidney.

8. The increase in size is due primarily to the increase in blood supply, possibly resulting from the removal of the capsule.

Quintuplets.

Nijhoff (*Brit. Med. Journal*, July, '04), reports a case of this extremely rare condition. The mother was a healthy woman of 34 who had borne one child seven years previous. Labor began at 8 a. m. and in a little over one hour all five children were born, alive but immature, surviving only an hour. The placenta was single, oval in form with five separate umbilical cords inserted in its fœtal side, each by a distinct sac formed from the fœtal amnion; three of these sacs were enclosed by a common chorion. The two others had a separate chorion. The author regards these quintuplets as the product of the fecundation of three ova.

Injection in Gonorrhoea of the Eye.

Hirsch (*Jour. A. M. A.*), reports the prompt cure of a threatened case of gonorrhœal infection of one eye from autoinfection. He made a single subcutaneous injection of a 1 to 500 solution of hydrargyrum oxycyanate, to which a little acoin had been added. There was considerable irritative reaction, but the process of infection was checked and three days later another injection was made, followed by a complete cure. He strongly recommends the use of such an injection in similar cases.

Formalin for Disinfecting Thermometers.

Denny (*Boston Med. & Sug. Jour.*), recommends keeping a pledget of absorbent cotton, with a few drops of formalin on it, in the bottom of the thermometer case. By careful bacteriological examination he determined that this would keep the thermometer sterile, and would destroy all the common mouth bacteria very effectually. In view of the simplicity of the device suggested, and the ever present danger of carrying infection with the thermometer, his suggestion is certainly worthy of a trial.

It is reported from London that Capt. E. R. Rost, of the Indian Medical Service, has succeeded in cultivating the bacillus of leprosy. It is also stated that he has made a serum, which he calls "leprolin," and that it has been used with beneficial results. No specific details as to treatment are given.

BOOK REVIEWS

Davis' Obstetrics. New (2nd) Edition. A Treatise on Obstetrics for Students and Practitioners. By Edward P. Davis, A. M., M. D., Professor of Obstetrics in Jefferson Medical College; Professor of Obstetrics and Pediatrics in the Philadelphia Polyclinic, Etc. Thoroughly Revised and much Enlarged. Octavo, 800 Pages, with 274 Engravings and 39 Full-Page Plates in Colors and Monochrome. Cloth, $5.00, net; Leather, $6.00, net. Lea Brothers & Co., Publishers, Philadelphia and New York, 1904.

Dr. Davis has furnished us with a thoroughly satisfactory work on obstetrics. His book is practical in the extreme, and he writes in brilliant style that is of itself remarkable. His plan of arrangement of the text is much to be commended, and he has introduced into his book, in addition to a masterly treatment of the subject in general, valuable considerations of subjects which are closely related with it.

In preparing the second edition the author has found it necessary to make additions amounting to about two hundred and fifty pages and he has taken the opportunity to increase the number of illustrations, which were so important a feature of the first edition. In its present form the work presents the subject of obstetrics as it is generally understood by the best modern thinkers and whatever is good of the new theories and practice has been accorded a place in its pages. The importance of the subject is such that it is entitled to the very greatest consideration on the part of the author and reader alike and Dr. Davis has certainly done his part with loyalty to his profession.

The author's logical plan of arrangement in the text has been to take up, first, the physiology of a condition, and, secondly, its pathology; nor does he leave a given subject until he has exhausted it, with the result that everything a man is called upon to know concerning that condition, whether normal or abnormal, has been carefully written down. In general the work is divided into five parts—Pregnancy, Labor, the Puerperal State, Obstetric Surgery and Infancy, with a valuable section on the jurisprudence of obstetrics, coming at the end of the book. This latter subject is one that is quite often overlooked by practitioners, but is one that is worthy their closest attention.

From the publisher's standpoint, the book is ideal, and in its present form deserves a place in the library of every physician.

The Suppression of Tuberculosis, together with Observations Concerning Phthisiogenesis in Man and Animals and Suggestions Concerning the Hygiene of Cow Stables and the Production of Milk for Infant Feeding, with Special Reference to Tuberculosis. By Prof. E. von Behring, University of Marburg. Authorized Translation by Charles Bolduan, M. D. Pages, 85. Cloth, $1.00. John Wiley & Sons, Publishers, 43 and 45 E. 19th St., New York, 1904.

We are indebted to Dr. Bolduan for an able translation of von Behrings' valuable work. The text unquestionably follows the original closely, but this is no fault in works of this kind. On the contrary, it is probable that a very much clearer idea is gained of von Behring's meaning that would be shown in less literal translation.

Prof. von Behring's work on tuberculosis is of course well known, and among the articles which form the text of the present work is his famous address at Cassel, September 25, '03, which gave rise to such a vigorous storm of criticism

after it had been delivered. A brief portion of his reply to some of these criticisms is also published in the appendix. In addition, there are his two articles on "Observations on Phthisiogenesis" and "Suggestions concerning the Hygiene of Cow Stables," reproduced from his writings of this year. These contain a deal of material for argument, for von Behring has not yet convinced the world of his entire correctness, but the descriptions of technique and the results he has obtained by following them serve to show exactly what he wished to prove and how he went about proving it.

The simplicity of style and the evident sincerity of the great German's research combine to fix his ideas firmly on many who read them. Dr. Boldau has given us some of the most fascinating reading to be found in the history of research work.

Lea's Series of Medical Epitomes. Nagel's Epitome of Nervous and Mental Diseases. A Manual for Students and Physicians. By Joseph Darwin Nagel, M. D., Consulting Physician to the French Hospital, New York. In one 12mo volume of 276 pages, with 46 illustrations. Cloth, $1.00 net. Lea Brothers & Co., Publishers, Philadelphia and New York, 1904.

When it is considered how much constant study and reading is required by students and practitioners of medicine that they may keep abreast of the developments that are constantly going on in their profession, the idea upon which Nagel's book is based is an exceptionally good one. He does the reading and research himself, bringing to the work all the capabilities of his experienced mind and his trained selective faculty, and then condenses the result in a small volume of less than 300 pages, from which it may be taken for the benefit of the reader. Such books are a striking example of the intelligent progress that has been made in methods of medical study within a comparatively short time. Where formerly men were practically obliged to seek their information at first hand from various authorities, either in text-books or by word of mouth, they are now enabled to secure the same amount of knowledge with infinitely less difficulty, with the non-essentials omitted and the main features of the subject made duly prominent.

Like other books in this excellent series, a list of questions is published at the end of each chapter in order that the reader may make a practical test of what he has really gathered from the text. There is scarcely single author or lecturer of high standing whose teachings have not been incorporated in Dr. Nagel's book, and he has made a diverse and difficult subject extremely succinct and clear.

Lea's Series of Medical Epitomes. Magee & Johnson's Epitome of Surgery. A Manual for Students and Practitioners. By M. D'Arcy Magee, A. M., M. D., Demonstrator of Surgery and Lecturer on Minor Surgery; and Wallace Johnson, Ph. D., M. D., Demonstrator of Pathology and Bacteriology in Georgetown University Medical School, Washington, D. C. In one 12mo volume of 295 pages, with 129 engravings. Cloth, $1.00 net. Lea Brothers & Co., Publishers, Philadelphia and New York, 1904.

This little book is, perhaps, possessed of a stronger claim to a place among real epitomes than the great majority of works of this kind. It should be a real boon to the student, and for this very reason it is a singularly timely and appropriate book just at this season. It makes no claim to originality, but it has a field to fill, and fills it. It contains a really surprising condensation of the best

modern thought on surgery in general, and its authors have even found space for going somewhat into particulars, here and there, with the result that the reader has in hand an absolutely authoritative presentation of the essentials of modern surgery, given him in concentrated form.

The intelligent man will do well to supplement his reading of some of the large, and valuable, text-books on surgery by a careful study of books like this. He will find it well worth his while from several points of view. The student, for example, will find that he can carry it about with him and read it when a text-book would be too clumsy; the book is provided with questions at the end of each chapter, so that the conscientious man may find out how much of the text he has assimilated; and the price of the book, when one considers its great practical value, is negligible.

Progressive Medicine, Vol. III, September, 1904. A Quarterly Digest of Advances, Discoveries and Improvements in the Medical and Surgical Sciences. Edited by Hobart Amory Hare, M. D., Professor of Therapeutics and Materia Medica in the Jefferson Medical College of Philadelphia. Octavo, 284 pages, 19 illustrations. Per annum, in four cloth-bound volumes, $9.00; in paper binding, $6.00, carriage paid to any address. Lea Brothers & Co., Publishers, Philadelphia and New York.

The busy practitioner snatches time from his work to do some reading, in the journals or in new books; on many occasions he notes something that is directly in line with what interests him most, but has no time to read it leisurely. He marks it and lays it aside for future reference, but when the time comes that he might read it, it has disappeared. One of the valuable features of books like Progressive Medicine is that they take the best modern thought on medical topics, condense it into an easily assimilable form, and furnish it to the busy man in a permanent shape.

The September issue is devoted to Diseases of the Thorax, Dermatology, Obstetrics and Nervous Diseases. One familiar with the literature on these four subjects for the past year must be aware of the extraordinary attention which has been paid to them. Old leads have been followed from new points of view, and a vast amount of work along new and original lines has also been done. The physical methods of treatment of disease, like balneotherapy, radiotherapy, actinotherapy and massage, come in for their share of attention, and the sociological aspect of tuberculosis is also taken up.

With men like Ewart, Gottheil, Norris and Spiller to write for this issue, it is likely to be one filled with authoritative writings and as a whole it is perhaps one of the most valuable that have yet been issued in the series.

At the meeting of the regents of the University of Michigan, held September 22 last, Dr. Walter R. Parker, of Detroit, was appointed to have charge of diseases of the eye in the medical college, and Dr. R. Bishop Canfield, of New York, to have charge of the department of diseases of the ear, nose and throat, the two physicians succeeding Dr. Flemming Carrow, who recently resigned. Dr. Parker will devote two days a week to this work, retaining his practice in Detroit.

Iowa physicians have followed the lead of Detroit in requesting the newspapers not to publish the names of physicians called in cases of accidents or illness.

Dr. Fred J. H. Tillapaugh, of Plymouth, Mich., was married on June 23, to Miss May Wilcox.

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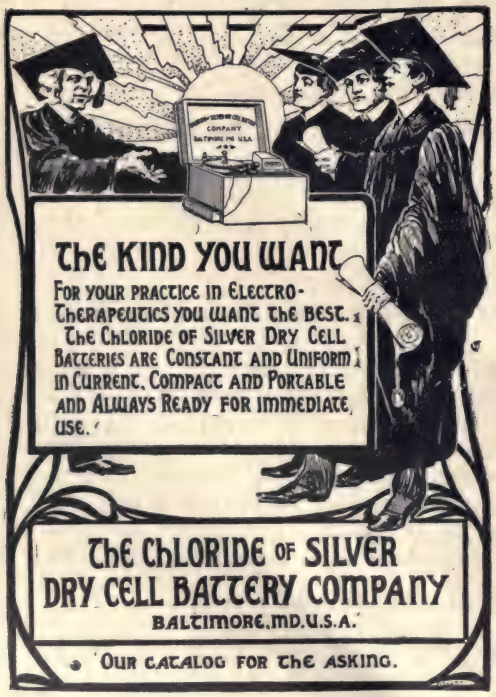
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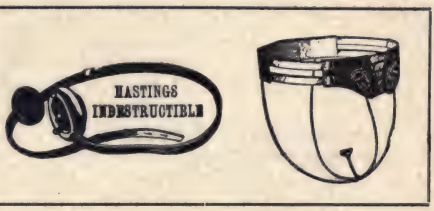

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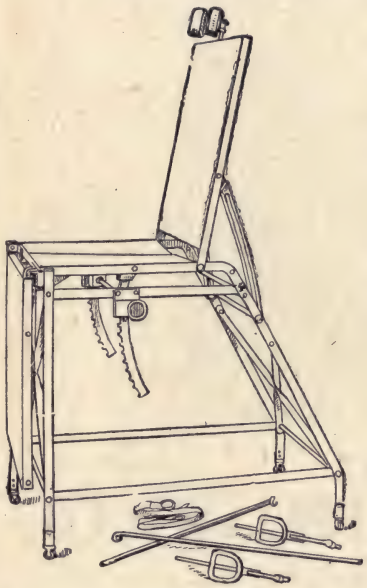

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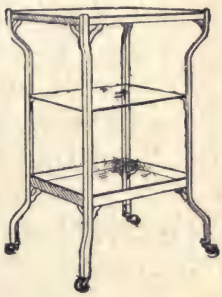

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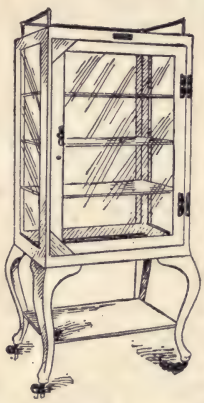

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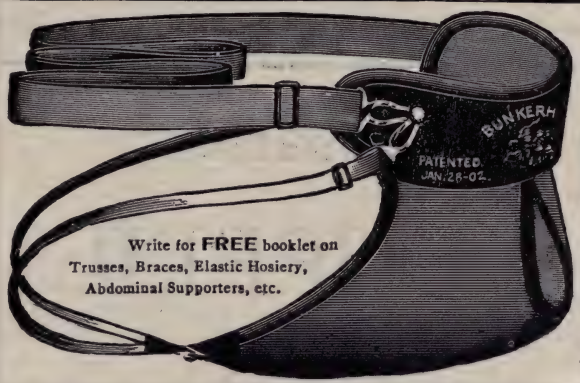

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Respiratory Tract: Affections, Symptoms, and Treatment.

By Dr. ARTHUR B. SMITH, Springfield, O.

The arevage physician is frequently vexed in finding a condition which resists his best efforts to bring about a cure. This holds good in almost every disease at some time or other, but particularly in affections of the respiratory tract, where there may be a great variety of symptoms in several cases of the same disease.

Almost every physician has some favorite prescription for coughs, bronchitis, laryngitis, etc., which he uses until suddenly it seems to lose its efficacy—why, no one knows. Then another remedy takes its place until it, too, fails to give the desired result. It is rarely that one finds a cough remedy which will be consistently good in the majority of cases. Theoretically there appears to be a well-founded objection to the use of cough syrups in general, but nevertheless there are times when nothing else gives satisfaction; therefore, the physician pins his faith to that remedy from which he and his patients derive the most good. It is not always easy to find such a remedy, but when it is once found, it is equally difficult to dispense with, and often the physician is almost compelled to resort to a routine treatment. In such cases, of course, he wants the best.

There are constantly being placed on the market new formulas for affections of the air passages. Some of these formulas are of undoubted benefit in some cases, but usually it will be found that the results are far from satisfactory. Many of them cannot be taken when there is any gastric complication, as is sometimes the case, because of consequent nausea and vomiting. Others seem almost invariably to act as cardiac depressants and are highly objectionable for that reason. With the advent of heroin, however, these disagreeable features have, to a great extent, been avoided. Heroin, in the vast majority of cases, can be tolerated by even the most sensitive stomach, and, if any disturbance should occur, it can easily be obviated by decreasing the dosage and then gradually resuming the previous amount. Heroin can be prescribed, in cases which are complicated by an enfeebled heart, without danger of depressing effects. As compared with codeine, its sedative action on the respiration is much more powerful. The fatal dose of heroin is said to be one hundred times the efficacious dose, while with codeine the efficacious dose is one-tenth of the fatal dose. In other words, heroine is ten times safer than codeine, and can be given in much larger doses, if necessary, without danger. It appears to exert a specific action on the center of respiration without causing disturbances of any other organs or centers, and there is no danger of acquiring any habit by its use.

In phthisical patients the well known lack of appetite and intolerance of various foods render it imperative to give remedies which will not in any way interfere with the digestive functions, while at the same time controlling or alleviating the cough and other distressing conditions.

Some time ago my attention was called to a preparation composed of a solution of heroin in glycerine, combined with expectorants, called Glyco-Heroin (Smith). Each teaspoonful of this preparation contains one-sixteenth grain of heroin by accurate dosage. It is of agreeable flavor, therefore easy to administer to children, for whom the dose can be easily reduced with any liquid, or by actual measurement. It possesses many advantages not shown by any other preparation I have used, and has none of their disagreeable features.

In citing some of the cases treated with this remedy I shall not go into a minute description of any case, but briefly state the conditions which existed and the results obtained, which were uniformly good.

Case 1. S. B., aged 16. Caught a severe cold while traveling. This developed into an unusually severe attack of bronchitis with mucous rales, pain cough and some slight fever. Prescribed Glyco-Heroin (Smith) one teaspoonful every two hours, decreased to every three hours. After a few doses were taken there was a decided improvement, the respirations were slower and deeper, the expectoration freer and the temperature normal. In a few days the patient was practically well and able to return to school. No medicine except Glyco-Heroin (Smith) was given and the results from its use were excellent.

Case 2. W. L., aged 31. Acute bronchitis. Painful cough, with difficult expectoration, particularly when in a reclining posture. Glyco-Heroin (Smith) in tea spoonful doses, every three hours, gave speedy relief and a cure was effected in a few days.

Case 3. S. W., aged 60. Chronic bronchitis. Had coughed for years, with expectoration of a thick, yellow purulent and very offensive matter. Had lost flesh gradually until about twenty pounds below usual weight. No appetite, very constipated, pains all over chest, night sweats and insomnia. Patient on the verge of nervous prostration and greatly weakened. She was given bromides, a tonic, and Glyco-Heroin (Smith), the latter in the usual dose at intervals of two hours. The first few doses were not well borne, as they seemed to cause some nausea, but by giving a smaller dose and then gradually increasing it, tolerance was soon obtained, and the results were remarkable. The cough and expectoration greatly decreased, the appetite improved and the patient became much better in every way. The treatment was continued as before, except that the Glyco-Heroin (Smith) was given every three hours. In three weeks the patient was eating almost everything she pleased, and sleeping well. The night sweats had stopped, together with the cough, and, as the patient expressed it, she "felt like another woman." At present she is in perfect health and needs no medicine except an occasional laxitive.

Case 4. B. E., aged 26. Severe bronchitis accompanying an attack of influenza. Various remedies were tried in this case, with negative results, until Glyco-Heroin (Smith) was given in teaspoonful doses every three hours. In a short time decided relief was obtained and the cough stopped permanently.

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The uric-acid problem affords an ever increasing interest, not only on account of the many attempts at solution and various theories set forth, but because of the wide field of investigation which is opened up with the fascinating prospect of bringing to light metabolic facts which have ever been shrouded in obscurity. We do know, however, whence uric-acid is derived, but the metabolism produced thereby has yet to be determined. Regardless of diet, rich and poor suffer alike from the accumulation of uric-acid, which sometimes occurs without any apparent failure in health; but more often are the kidneys and bladder affected, and the digestive organs impaired; hence excessive uric-acid is frequently responsible for heartburn, flatulence and liver trouble. Lithia has been tried and found useless, for when taken by the mouth it chemically combines with the phosphates in its progress through the stomach ,and there forms insoluble compounds. The best remedy we know possessing a solvent action and eliminative properties is Kutnow's Powder, which is largely used by the Medical Profession, and has always given the highest satisfaction, wherever it has been tried.

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Leucorrhoea.

By W. B. KEENE, M. D., Philadelphia, Pa.

Mrs. R. P., had been under the care of a prominent physician who confined his treatment to hot vaginal douches of a one to two thousand solution of Bichloride of Mercury. These douches pro-

duced a great deal of pain and did not appear to benefit the case materially. When the patient came to me I found the cervix much congested and the vaginal mucous membrane eroded to a considerable extent. Decided to try douches of a weak solution of Glyco-Thymoline to be taken as hot as possible. Comfort and improvement were noted from the first douche and in a few weeks the woman was well.

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Under the head of "Therapeutics," the Medical Examiner, contains the following by Walter M. Fleming, A. M., M. D.* regarding this valuable combination: "Its effect on the respiratory organs is not at all depressing, but primarily it is stimulating, which is promptly followed by a quietude which is invigorating and bracing, instead of depressing and followed by lassitude. It is not inclined to affect the bowels by producing constipation, which is one of the prominent effects of an opiate, **and it is without the** unpleasant sequels which characterize the use of morphine. It neither stupefies nor depresses the patient, but yields all the mild anodyne results without any of the toxic or objectionable phases.

When there is a persistent cough, a constant "hacking," a "tickling" or irritable membrane, accompanied with dyspnoea and a tenacious mucous, the treatment indicated, has no superior. In my experience I found one "Antikamnia & Heroin Tablet" every two or three hours, for an adult, to be the most desirable average dose. For night-coughs, superficial or deep-seated, one tablet on retiring, if allowed to dissolve in the mouth will relieve promptly, and insure a good night's rest. In short, it will be found futile to delve for a more prompt and efficient remedy than "Antikamnia & Heroin Tablets" in all bronchial complications with laryngeal irritation, dyspnoea, asthma, winter-cough and general irritabilty of the thoracic viscera."

*Qualified Examiner in Nervous and Mental Diseases for Supreme Court, New York City.

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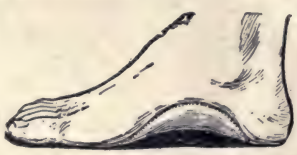

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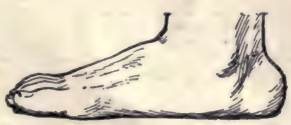

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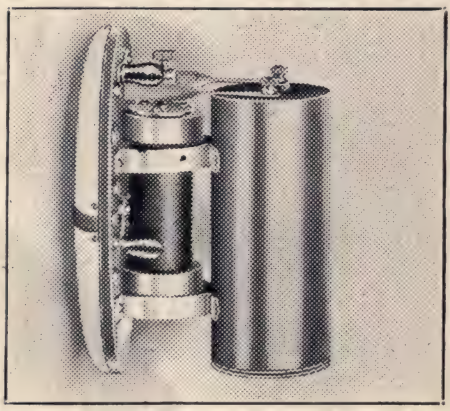

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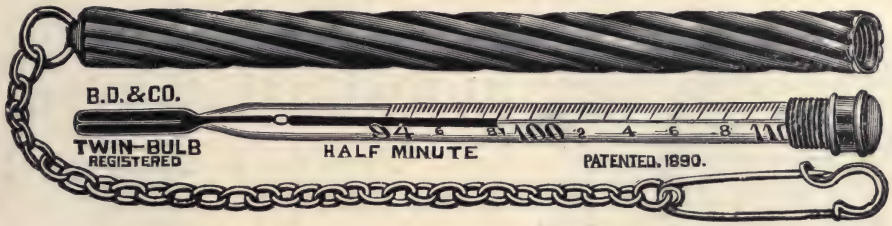

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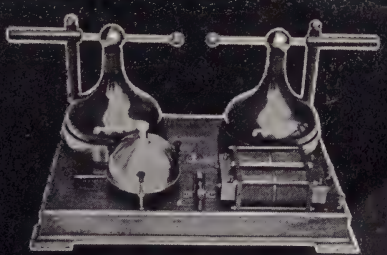

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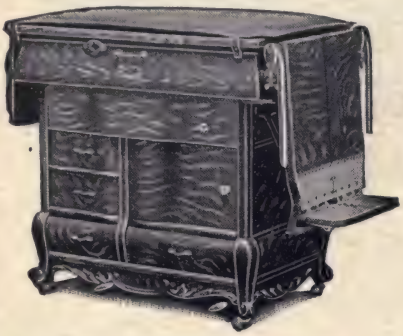

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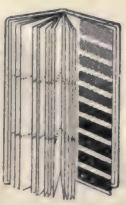

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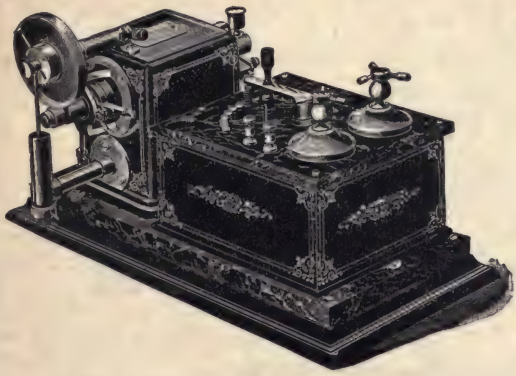

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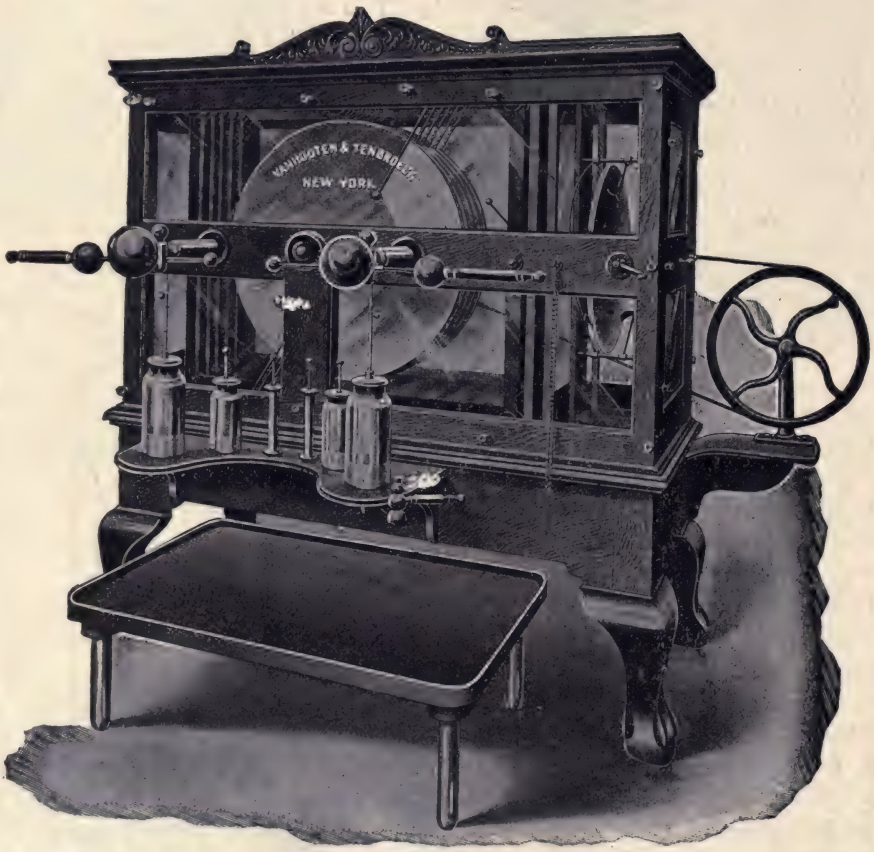

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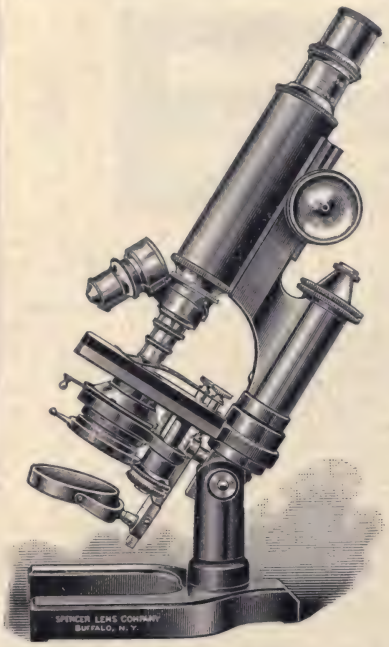

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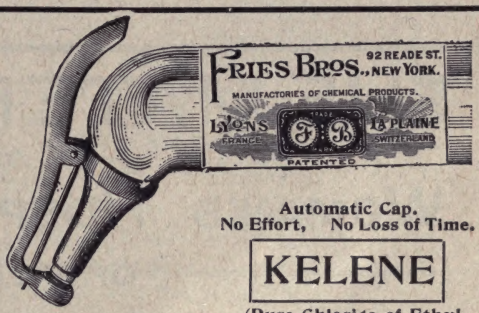

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